## Psychological Abstracts

VOLUME 19

NUMBER 1

JANUARY 1945

#### GENERAL

(incl. Statistics)

- 1. Bancroft, T. A. On biases in estimation due to the use of preliminary tests of significance. Ann. math. Statist., 1944, 15, 190-204.—In the application of statistical theory to specific data, there is often some uncertainty about the appropriate specifications of tests of significance. In such cases, preliminary tests of significance have been used, in practice, as an aid in choosing a specification. The author considers two cases: (1) a test of homogeneity of variances and (2) a test of a regression coefficient, in a study of the use of certain "rules of procedure" in the control of bias. These rules consist in the use of tests of significance as an aid in determining an appropriate specification and, hence, the form that the completed analysis shall take, which involves acting as if the will hypothesis were false in those cases in which it is refuted at some assigned significance level and, on the other hand, acting as if the will hypothesis were true in those cases in which we fail to refute it at the assigned significance level.—

  S. B. Sells (Office of Price Administration).
- 2. Bergmann, G. An empiricist's system of the sciences. Sci. Mon., N. Y., 1944, 59, 140-148.— In contradiction to the situation within the physical sciences, theoretical unification within the biological and behavioral levels has not been attained. Even within each of these two levels, there are still lacking comprehensive bodies of empirical laws which could be trusted in the theoretical sense that they are certain to provide the cues for a potent and comprehensive theory. The whole frame of modern science indicates the "the improbability of what has here been exhibited as the formulable empirical core of the vitalistic contention. In this sense mechanism may indeed be said to be an essential part of our scientific and cultural frame of reference."—E. Girden (Brooklyn).
- 3. Boechat, J. La psychologie dans l'armée. (Psychology in the army.) Praxis, 1943, 32, 562.
- 4. Brantmay, H. La psychologie au service de la médecine. (The use of psychology in medicine.) Praxis, 1943, 32, 474.
- 5. Brickner, R. M. Man and his values considered neurologically. J. Phil., 1944, 41, 225-243.— In the perspective of biological evolution, the function of the intellect is not to free us from instinctive drives but rather to manifest them in an elaborate and well-disguised way. On the other hand, the intellect dreams of a state of freedom from the necessity of living by primordial urges. Thus arise taboos and ethical standards and, in only too many cases, serious conflicts between the demands of the forebrain and those of the spinal cord, brain stem, and thalamus. The author suggests that these conflicts, which manifest themselves in pathological feelings

of shame and inferiority, can be prevented or made less serious by the right kind of education. Instead of trying to "teach children away from any knowledge of their biological selves," they should be helped to see what social standards mean in terms of the organic ego. Also in the light of such knowledge, "newly developing values might evolve, not in a haphazard manner, but on the foundation of fact."—
R. H. Dotterer (Pennsylvania State College).

- 6. Bronk, D. W. The discovery and interpretation of biological phenomena. Proc. Amer. phil. Soc., 1944, 87, 307-312.—This is one article of a symposium on the organization, direction, and support of research. The problems and responsibilities of the research worker are discussed, and suggestions are made for the improvement of research facilities and organization.—C. G. Mueller (Brown).
- 7. Burnham, R. W. Logic in psychosomatic medicine. Psychol. Rev., 1944, 51, 257-259.— Criticism is aimed at the trends revealed in the journal, Psychosomatic Medicine. The author is concerned with the controversy between the psychogenic versus the structural origin of certain disorders. The controversy, it is stated, can be dissolved by the use of simple operational logic. While it is admitted that many reports in this journal have pragmatic value, it is held that good science should not be discarded in the interest of pragmatic application.—M. A. Tinker (Minnesota).
- 8. Burt, C. Mental abilities and mental factors. Brit. J. educ. Psychol., 1944, 14, 85-94.—The term "ability" conveys the notion of a permanent power of mental operation, while "factor" is merely a principle of classification of a large number of correlated trait-measurements. Although abilities are factors, it does not follow that factors are necessarily abilities. Factor analysis by means of mathematical methods has isolated psychological factors in agreement with the broad principles of classification of traditional faculty psychology, although these are not regarded as separate causal powers. The measurements of factors are best-weighted averages or sums of the several test-measurements: for the general factor, that of all the measurements; for a bipolar factor, that of the residuals left after the preceding factors have been deducted; and for a group factor, that of the residual measurements found in a limited group of related tests. Since the nature of the factors identified depends upon what test-measurements are averaged, a proper sampling of tests or traits in essential. The actual identification of factors with abilities can be confirmed by introspective study of the mental processes involved and by assessments by competent observers.—R. C. Strassburger (St. Joseph's College for Women).
- 9. Butsch, R. L. C. A work sheet for the Johnson-Neyman Technique. J. exp. Educ., 1944, 12, 226-241.—The Johnson-Neyman Technique is a pro-

cedure for determining the significance of the difference between two groups of individuals on one variable, when two other variables are held constant by statistical methods. In this study, the technique is reanalyzed to make possible the use of logarithms. A work sheet, which further facilitates the calculations, is presented and its use illustrated.—E. B. Mallory (Wellesley).

10. Casanova, T. The use of the method of runs for testing the randomness of the order of examination items. J. exp. Educ., 1944, 12, 165-168.—The author describes a technique for determining the normal range of distribution for the frequencies of runs in the position of correct answers in a multiple-choice test, of any length. A. M. Mood's formulas for the first and second moments of the distribution are presented in somewhat abridged notation, simplified, tabled, and applied.—E. B. Mallory (Wellesley).

11. Casanova, T. The measurement of randomness in test items. J. exp. Educ., 1944, 12, 169-183.

—Since so many techniques in the field of tests and measurement assume randomness of order in their basic materials, it is important that the concept be understood and that suitable means of testing randomness be widely known. The meaning of randomness is discussed, and 14 methods of testing a series for this feature are described, while 4 other methods are listed. There is a bibliography of 21 titles.—E. B. Mallory (Wellesley).

12. Cattell, R. A note on correlation clusters and cluster search methods. Psychometrika, 1944, 9, 169-184.—Four methods of determining the clusters in a correlation matrix are described and compared. The choice of method has to be made according to the size of the matrix and the type of cluster sought. The relativity of clusters is emphasized and a distinction is drawn between phenomenal clusters and nuclear clusters. The relative utility of clusters and factors is briefly discussed.—(Courtesy Psychometrika).

13. Cattell, R. B. Psychological measurement: normative, ipsative, interactive. Psychol. Rev., 1944, 51, 292-303.—Ipsative is suggested to designate scale units relative to other measurements on the person himself. The varieties of behavioral measurements are ipsative, normative, and interactive. An attempt is made to discover what is implicit in several recent developments of psychometry. An attack is made on some unsolved problems of mental measurement. It appears that some hitherto disparate regions of endeavor and discussion actually hinge on the same concepts.—M. A. Tinker (Minnesota).

14. Davis, F. B. A new item-analysis chart. Psychol. Bull., 1944, 41, 591.—Abstract.

15. Della Casa, F. Bin Adaptometer für den praktischen Arzt. (An adaptometer for the practicing physician.) Ophthalmologica, 1943, 106, 143; 189.

16. Dewey, J. Some questions about value. J. Phil., 1944, 41, 449-455.—Four questions are asked: (1) What connection is there, if any, between an attitude that will be called prizing or holding dear and desiring, liking, interest, enjoying, etc.? Prizing

is, by definition, a way of behaving for which equivalent names would be caring for, fostering, being loyal to, etc. The question is, then, whether desiring and like terms are also to be given a behavioral meaning or whether they are to stand for something internal or mentalistic. (2) What is the connection between valuing, in the sense of prizing, and valuation, in the sense of evaluating? In other words, does valuation affect or modify things previously valued, and does valuing already contain an element of evaluation? (3) Is there anything unique or distinctive about valuation-propositions as propositions? Many discussions of the relation of values to facts seem to imply that there is. (4) Is the scientific method of inquiry applicable in determining the truth or falsity of valuation-propositions? One answer would imply that differences in valuing may be removed by sociocultural changes; the other, that they cannot be settled in a reasonable way.-R. H. Dotterer (Pennsylvania State College).

17. Dunlop, W. R. Organization. Phil. Sci., 1944, 11, 171-177.—The author finds that in biology, in biochemistry, in sociology at both the biological and civilized levels, and even in chemistry, physics, and astronomy, the term organization has been used in a welter of confusing senses. What, then, is organization? It is, he says, a process rather than a state or condition. It is the evolution and development of purposive association with division of labor. In the accepted sense of the word, it is distinctly observable at the biophysical and cytological levels. At the psychological level, it is indefinite and problematical. "In strictly scientific usage [the term] should be restricted to biology and sociology in the present state of knowledge." The author suggests that, in discussing the problems of human association, writers should distinguish more carefully between organization as a means to an end and the organization (i.e., the state) under which individuals have to live and work .- R. H. Dotterer (Pennsylvania State College).

18. Estiá, E. Las corrientes del pensamiento filosofico y la ciencia. (Science and the currents of philosophical thought.) Rev. Educ., La Plata, 1944, 85, No. 2, 10-34.—In present-day civilization the functions of science and philosophy have become generally confused, in view of the exteriorization and depersonalization of culture. Fundamentally, philosophy deals with noumena, and science with phenomena. The understanding of this distinction, clear in the 17th century, has largely been lost. A philosophy that seeks to resolve the findings of science is thus inadequate, for philosophy is properly concerned with underlying spiritual values. Conversely, this is not a realm in which science can expect to pronounce judgment.—H. D. Spoerl (American International College).

19. Evans, B. The psychiatry of Robert Burton. New York: Columbia University Press, 1944. Pp. ix + 129. \$2.00.—This study of The Anatomy of Melancholy and of the "fantastic great old man" who wrote it was prepared in consultation with a psychiatrist, G. J. Mohr, and is "the first full-length presentation of Burton's psychiatric theories in the light of modern psychological knowledge." The author disagrees with those critics who have regarded

the Anatomy as a practical joke and evaluates the book not only as a serious treatise on melancholia but also as an acute observation of mental pathology and as a remarkably modern guide to psychotherapy. Not being a physician but rather a fellow of Oxford University, Burton based his psychology less on clinical cases than on introspection, or "melancholizing." His own personality "offered a rich field for introspection," for "he had suffered an unhealable narcissistic injury in childhood." After the chapters entitled The Man, The Book, and Symptomatology, the author outlines Burton's etiology of melancholy as consisting of three central factors: heredity, lack of affection in childhood, and sexual frustration. As for Burton on therapy, "there is hardly any treatment now employed to which he does not allude," excepting only the shock therapies. A 12-page bibliography, with brief comments on each listing, is appended.—S. B. Williams (U. S. Naval Reserve).

20. Holzinger, K. J. Factoring test scores and implications for the method of averages. Psychometrika, 1944, 9, 155-168.—The general procedure and detailed steps for obtaining complete factor analyses of scores are presented. Both orthogonal and oblique factors are considered. It is shown that a single average by conventional procedure gives an incomplete summarization of the data when the rank exceeds one. There should be as many averages as there are common factors.—(Courtesy Psychometrika).

21. Hull, C. L. Value, valuation, and natural science methodology. Phil. Sci., 1944, 11, 125-141.

—The author presents a systematic basis for a natural-science theory of value. The key concept is that of primary need. It is postulated that, if an organism is in a condition of primary need, it will produce a sequence of acts likely to reduce the need, and that successful acts tend to be repeated. Thus reaction potentials are established which give rise to the behavior known as striving. Due to a spontaneous oscillation of reaction potentials, organisms sometimes value the same state of affairs differently. Some typical approaches to the theory of value are related to this scheme: Bentham's pain is equated to need: Perry's interest, to striving; etc. Introspective reports concerning needs, habit structures, and reaction potentials are useful for rough qualitative purposes, but they do not contribute much to the systematic formulation of primary quantitative laws.—R. H. Dotterer (Pennsylvania State College).

22. Jean, F. C., Harrah, E. C., Herman, F. L., & Powers, S. R. Man and his biological world. Boston: Ginn, 1944. Pp. viii + 631. \$3.50.—This is a revision of a college textbook, Man and the Nature of His Biological World, published in 1934.— E. Girden (Brooklyn).

23. Kelley, T. L. A variance-ratio test of the uniqueness of principal-axis components as they exist at any stage of the Kelley iterative process for their determination. *Psychometrika*, 1944, 9, 199-200.—The article by F. B. Davis (see 19: 246) in the same issue of this journal provides illustration of the method and formulae given here.—G. R. Stone (Indiana).

24. Köhler, W. Value and fact. J. Phil., 1944, 41, 197-212.—Modern scientists have, for the most part, excluded value from serious consideration. Neutral facts and values have been regarded as two sharply distinguishable genera. In psychology, however, such a dualism is impossible; for it cannot avoid a consideration of motivation, and the goal of motivated behavior has value characteristics. The author rejects the theory that value is a vector which issues from the self and maintains that the vector issues from the object qua valuable. The field of the physicist attracts an entity toward, or repels it from, the source of the field. In much the same way we may think of the self as affected by the demand of a value. It is further suggested that both the self and the perceptual object are somatically represented by cortical processes. Thus it becomes possible to hold that "a demand extends from a value object to the self just as a field in the brain would issue from an object process and affect the somatic correlate of the self."—R. H. Dotterer (Pennsylvania State College).

25. Lillie, R. S. Vital organization and the psychic factor. Phil. Sci., 1944, 11, 161-170.—Inasmuch as complex systems which are the seat of physical activity, if left to themselves, tend to lose organization, it is necessary in the case of living organisms to assume the operation of a directive factor. The author maintains that this stabilizing factor is psychic. This factor, which has its activity and influence only in the present, is responsible for all novel or originative activity, as distinguished from simple routine, persistence, or inertia. These are due to the influence of the past. In course of time the structure of routine and habit becomes firmer, and the psychic factor thus becomes less capable of controlling it.—R. H. Dotterer (Pennsylvania State College).

26. London, I. D. Psychologists' misuse of the auxiliary concepts of physics and mathematics. Psychol. Rev., 1944, 51, 266-291.—A detailed examination is made of the mathematical and physical concepts employed in Lewin's topological system. Concepts covered include the nature of force, topological space, nature of causality, nature of field, concept of analysis, aspects of law formation and topology. In each instance, a statement of the physical or mathematical concept is followed by a critical evaluation of Lewin's use of the concept. In many instances it is pointed out that Lewin's position is wrong or his usage is misleading. Thus, in considering topology, the following conclusion is given: "a mathematically unified field-theory for all of psychology along Lewin's pattern is without significant value and, furthermore, in view of the sharply divergent stand of modern physics, generally impossible."—M. A. Tinker (Minnesota).

27. Martin, A. Y. The place of subjectivity in research. J. Psychol., 1944, 18, 41-43.—"Since all research is based upon observation, and observation cannot be separated from the observer, there is just as much demand made upon the subjective element in research as there is upon the objective. . . . The objective exists only as observed by the subjective. . . . Subjectivity has a fundamental, basic place in research. But it is acceptable only in so far as the

experiencing subject separates his biases, prejudices, his logic-tight compartments, his handicaps, his shortcomings, his emotions, his idiosyncrasies, and his preconceived notions from the collecting, organizing, and the interpreting of his data."—R. B. Ammons (Iowa).

28. Moore, K. G. Eleanor Harris Rowland Wembridge: 1883-1944. Psychol. Rev., 1944, 51, 326-327.—Obituary, contributions, and appreciation.—M. A. Tinker (Minnesota).

 Pillsbury, W. B. Joseph Jastrow: 1863-1944.
 Psychol. Rev., 1944, 51, 261-265.—In this obituary and appreciation, emphasis is placed upon Jastrow's early experimental contributions, the establishment of the Wisconsin laboratory, his eclectic viewpoint,

- and the popularization of psychology in lectures and books. Portrait.—M. A. Tinker (Minnesota).

  30. Sarbin, T. R. The logic of prediction in psychology. Psychol. Rev., 1944, 51, 210-228.—An insistent problem is concerned with the relative accuracy of clinical versus statistical predictions of behavior. Prevailing concepts are critically analyzed. This revealed two kinds of methods of prediction: the so-called intuitive and the inferential. These necessitated the postulation of two interpretations of probability. Empirical data and logical argument are presented to show that the two interpretations "are essentially one, namely, the frequency interpretation. All meaningful prediction is based on informal or formal statistical (inferential) manipulations." The author considers that the use of unverified hypotheses by trained clinical workers is unwarranted. 55-item bibliography.-M. A. Tinker (Minnesota).
- 31. Silsby, E. Psychology in bondage; a teacher's plea for deepening and expansion. Hibbert J., 1943, 41, 325-334
- 32. Tecoz, H. F. L'homme dans l'espace et dans le temps. (Man in space and time.) Praxis, 1943, 32, 476.

33. Travis, R. C. A new stabilometer for studying dynamic equilibrium in the standing position. Psychol. Bull., 1944, 41, 586-587.—Abstract.

- 34. Tucker, L. R. The determination of successive principal components without computation of residual correlation coefficients. Psychometrika, 1944, 9, 149–153.—A procedure is presented for determining the successive principal components of a correlation matrix where it is not necessary to compute the successive tables of residual correlations. The original correlation matrix is bordered with a new row and column for each principal component that is determined.—(Courtesy Psychometrika).
- 35. Ullman, J. The probability of convergence of an iterative process of inverting a matrix. Ann. math. Statist., 1944, 15, 205-213.—This is a further study of an efficient iterative method of matrix inversion described by Hotelling in the 1943 Annals, with an examination of the probability of convergence in relation to the accuracy of the initial approximation .- S. B. Sells (Office of Price Administration).
- 36. Visher, S. S. Age at starring in American Men of Science. Science, 1944, 100, 248-249.—For 12 sciences, data are given showing the median age

of starred scientists at intervals from 1903 to 1943 and the oldest, youngest, next youngest, etc. at the time of starring .- F. A. Mote (Connecticut).

- 37. Wald, A. On a statistical problem arising in the classification of an individual into one of two groups. Ann. math. Statist., 1944, 15, 145-162.-In economic, social, and industrial problems we are often confronted with the task of classifying an individual into one of two groups on the basis of a number of tests. In all such problems, it is assumed that there are two populations, say #1 and  $\pi_1$ , one representing the population of individuals fit, and the other the population of individuals unfit for the purpose under consideration. This paper presents a mathematical solution of the statistical problem of classifying an individual into one of the populations  $\pi_1$  and  $\pi_2$  on the basis of his test scores and on the basis of past experience, given in the form of two samples, one drawn from  $\pi_1$  and the other from  $\pi_2$ —S. B. Sells (Office of Price Administration).
- 38. Woodworth, R. S. James McKeen Cattell: 1860-1944. Psychol. Rev., 1944, 51, 201-209.—This is a sketch of Cattell's professional contributions and an appreciation of his position in American psychology and of his co-operative relations with others. Attention is directed to his experimental contributions, his influence in shaping the trends of American psychology, his editorial and publishing work, and his participation in the general organization of scientific men and in the development of Science Service. Portrait.—M. A. Tinker (Minnesota).
- 39. Wyatt, F., & Teuber, H. L. German psychology under the Nazi system: 1933-1940. Psychol. Rev., 1944, 51, 229-247.-Various aspects of the trends in recent German psychology are outlined: influence of philosophy, effects of Klages' antirationalism, prominence of characterology, concept of structure and organic wholeness, integral typology, military psychology, industrial psychology, physio-logical psychology, and psychoanalysis. The effect logical psychology, and psychoanalysis. The effect of National-Socialism on the trends varied. In general it promoted an increase of unscientific and irrational attitudes. The study of personality suffered most, while straight physiological research seemed comparatively unaffected. Most psychologists turned early to National-Socialism. In fact, many of the developmental forces now prominent were present prior to 1933, and the political changes have merely brought them into the open. 169-item bibliography.-M. A. Tinker (Minnesota).

[See also abstracts 81, 203, 226, 240, 246, 255, 262, 271.]

#### **NERVOUS SYSTEM**

40. Bülbring, E. The action of adrenaline on transmission in the superior cervical ganglion. J. Physiol., 1944, 103, 57-67.—Contractions of the cat's nictitating membrane in response to stimulation of the preganglionic fibers are increased by addition to the perfusion fluid of small doses of adrenaline and decreased by larger doses. crease occurs only with submaximal stimuli at slow rates. The response to a dose of acetylcholine injected into the perfusion circuit is augmented by small amounts of adrenaline and depressed by larger amounts. The perfusate collected during prolonged preganglionic stimulation contains an adrenaline-like substance which has been assayed biologically and chemically. The chromaffin cells in the ganglion are suggested as the source of the adrenaline.—M. E. Morse (Baltimore, Md.).

41. Bullock, T. H. Neuromuscular facilitation in Scyphomedusae. J. cell. comp. Physiol., 1943, 22, 251-272.—Representatives of three families of the Scyphozoa depend upon a process of facilitation of contraction height for the normal gradation of swimming movements. The probable site of facilitation is the myoneural junction. There is also described a phenomenon which the authors believe is best attributed to a neuro-neural facilitation; and the nature of this process is regarded as strong evidence for the existence of synapses in the nerve net. There is no indication that such synapses in coelenterates are polarized.—F. A. Beach (American Museum of Natural History).

42. Campbell, B. The effects of retrograde degeneration upon reflex activity of ventral horn neurons. Anat. Rec., 1944, 88, 25-38.-Cats and rhesus monkeys were used in the experiments; dial anesthesia was used during observations. Data were obtained by stimulation and recording with the cathode ray oscillograph. The author concludes: (1) Section of peripheral nerves or of ventral roots in cats and monkeys leads to the loss of the proprioceptive component of the spinal reflex during the period of chromatolysis. (2) This is directly correlated with the alteration of the ventral horn cell and does not stem from degeneration in the sensory system. (3) Conduction occurs from the peripheral to central fibers of the dorsal root ganglion cells after retrograde degeneration induced by nerve section.-S. R. Hathaway (Minnesota).

43. Eccles, J. C. The nature of synaptic transmission in a sympathetic ganglion. J. Physiol., 1944, 103, 27-54.- Eccles investigated synaptic potential in the normal and curarized stellate ganglion of the cat with single and repetitive stimulation (particularly the effect of eserine) to throw light on the role of acetylcholine. Eserine changes synaptic potentials only by the addition of a prolonged potential build up during stimulation and long outlasting the decaying phase of the normal potential. The fact that eserine does not modify the normal peak and tail is evidence against the acetylcholine hypothesis of synaptic transmission. The author's explanation is that a preganglionic impulse exerts a brief depolarizing action on the ganglion cell (peak) by the direct effect of its action current, while the tail effect is due to liberated acetylcholine, which is removed by cholinesterase. The eserine prolongation is caused by acetylcholine liberated by preganglionic stimulation, but not removed by cholinesterase.—M. E. Morse (Baltimore, Md.).

44. Juba, A. Über die optico-motorische Bahn. (Concerning the optic motor pathway.) Mschr. Psychiat. Neurol., 1943, 108, 103-112.

45. Lashley, K. S. Studies of cerebral function in learning. XIII. Apparent absence of transcortical association in maze learning. J. comp. Neurol.,

1944, 80, 257-281.—The adjacent architectonic fields of both cerebral hemispheres of rats were separated by knife-thin incisions through the cortex and the underlying fibers for the purpose of determining the degree of participation of different cortical areas in maze performance. Schedules of original training and retention trials provided an adequate basis for the estimation of decrements in initial learning and in losses of preoperatively formed habits. The author found that separation of each pair of adjacent architectonic fields was followed in some cases by quite normal performances, but in other cases there was some impairment. However, where impairment was found, it could be ascribed to the interruption of thalamocortical fibers or to the destruction of cortical No impairment appeared to arise from interruption of transcortical fiber connections, per se. These results corroborate and extend similar findings reported by Lashley about one and a half decades earlier .- C. P. Stone (Stanford).

46. Nonidez, J. F. The present status of the neurone theory. Biol. Rev., 1944, 19, 30-40.—The author reviews some of the recent literature on the controversy over the neurone theory vs. the neurosyncytial theory. He discusses the results from experiments on the histogenesis and growth in vitro of the nervous system, physiological and histological evidence for the synapse, and experiments on degeneration and regeneration at the synapse. The data are interpreted as supporting the neurone theory and failing to support the sympathetic ground plexus of Boeke or the terminal reticulum of Stöhr and his students.—C. G. Mueller (Brown).

47. Obrador Alcalde, S. Procesos de inhibición de la corteza cerebral. (Inhibitory processes of the cerebral cortex.) Ciencia, Méx., 1944, 4, 289-295.—In line with Sherrington's formulations are investigations by the author demonstrating various patterns of cortical inhibition (transcortical, interhemispheric, etc.) obtained in motor areas. Polygraph records support the view that inhibition is an active process (samples are reproduced) "and perhaps suggest a variety and diversity of causal factors." The basic nature of inhibition is still unknown.—H. D. Spoerl (American International College).

48. Riese, W. The principle of compensation of nervous function. J. nerv. ment. Dis., 1944, 100, 263-274.—Compensation implies, not the survival or revival of an old function, but the emergence of a new function to replace some lost function. The new function develops from all the elements present in the organism, but these are now used in new combinations. It appears in order to satisfy the organogenetic needs of a temporarily injured but tightly integrated organism. When a structure or function is lost, not only is its particular role lost but its effects upon and interactions with the remaining structures and functions of the total organism are also lost. Compensatory behavior appears in order to restore to the organism "an undiminished organogenetic influence."—L. B. Heathers (Smith).

49. Strong, O. S., & Elwyn, A. Human neuroanatomy. Baltimore: Williams & Wilkins, 1943. Pp. x + 417. \$6.00.—This text on the structure and function of the human nervous system is divided into two parts. The first part deals with the general organization, embryology, histology, and fundamental problems of the nervous system, while the second part is devoted to the architectonics of the central nervous system, which the authors refer to as applied neuroanatomy. The plan of presentation is the same for each topic treated: the gross structures and relationships are first presented with the aid of original drawings and diagrams, after which the internal structure is presented in detail with the aid of microphotographs of human material, and finally the anatomical features of each part are reviewed with a discussion of their connections and clinical significance.— T. G. Andrews (Chicago).

50. Zigler, M. J. The neurophysiology of post-contraction. Psychol. Rev., 1944, 51, 315-325.—The phenomenon of involuntary movement in postcontraction following sustained tension exerted by the arm has been much studied. Variation with intensity and duration of stimulation has been determined. The physiological basis of the phenomenon, however, has not been clearly established. Theories of post-contraction (suggestion, contrast, catatonus, fatigue, idiomuscular action, antidromic volleys, and reflex action) are examined critically and, for the most part, are rejected as inadequate. If the sequence of neuromuscular events set in action by the stimulus are described in sufficient detail, the phenomenon of post-contraction would be understood. The author offers his view on this in terms of building up a physiological gradient in the spinal centers from frequencies over the afferent The altered physiological conditions developed in the spinal centers set off impulses over the efferent neurones as soon as voluntary contractions (stimulus) end. 56-item bibliography.-M. A. Tinker (Minnesota).

#### [See also abstract 69.]

#### RECEPTIVE AND PERCEPTUAL PROCESSES

51. Atkinson, T. G. Some elemental thoughts on color vision. Optom. Whly, 1944, 35, 737-738.— The importance of the strength of the color stimulus, as well as of the simultaneous stimulation with more than one color, is emphasized.—D. J. Shaad (Durham, N. C.).

52. Backenstoe, G. S. Preliminary survey on the color-vision plates of Shinobu Ishihara. J. Aviat. Med., 1944, 15, 272-278.—The author tabulated the responses of 58 color-blind individuals to each plate of the Ishihara Tests for Color Blindness (8th ed.). It was found that the responses did not always conform to the key furnished with the test and that certain of the plates were more valid than others in detecting color blindness.—A. Chapanis (U. S. Army Air Forces).

53. Brunswik, E. Distal focussing of perception: size-constancy in a representative sample of situations. Psychol. Monogr., 1944, 56, No. 1. Pp. 49.— Using one individual as subject, "a traditional laboratory problem [of size-constancy] has... been approached after the fashion of a statistical survey rather than of an 'experiment." The results demonstrate perceptual constancy and the difficulty of responding to retinal proportions even when an

effort is made to do so. Overestimation of the vertical was not found in these observations, but the Weber law applied to length-discrimination was confirmed. A certain amount of internal inconsistency within the perceptual system "supports the writer's previously suggested interpretation of perception as a primitive and relatively autonomous function within the total cognitive system of the human being." A bibliography contains 46 references.—H. Helson (Bryn Mawr).

54. Chapman, W. P. Measurements of pain sensitivity in normal control subjects and in psychoneurotic patients. Psychosom. Med., 1944, 6, 252-257.—Studies were made of the pain sensitivity of a large group of normal control subjects and of a group of patients with psychoneuroses, as well as of several ethnic groups. So far as Negroes were concerned, "it was concluded that increased pigmentation of the skin of the Negroes could not account for the differences observed in this ethnic group." The pain perception and pain reaction values of Italians and individuals of Russian and Jewish extraction corresponded more nearly to those of the Negroes than to those of the northern European group. "There was a tendency for the anxiety neurotics and hysterics to wince with a smaller stimulus than the patient with hypochondriasis." Pain sensitivity decreased with age, and the pain perception of psychoneurotic patients did not differ from that of the normal controls .- P. S. de O. Cabot (United Drug, Inc.).

- 55. Colenbrander, M. C. Die optischen Arbeiten von F. C. Donders. (The optical works of F. C. Donders.) Ophthalmologica, 1943, 105, 61.
- 56. Dunlap, K. Alleged binocular color mixing. Psychol. Bull., 1944, 41, 589.—Abstract.
- 57. Dvorine, I. Dvorine color perception testing and training charts. Vol. I: Testing charts. Vol. II: Training charts. Manual. Baltimore: Author, 2328 Eutaw Place, 1944. Plates, 60 & 70. \$25.—Pseudoisochromatic charts are provided for the testing and training of color perception. Sample record sheets and an instruction booklet are included. "The time required to train a person who has difficulty with his color perception depends on the motivation of the patient, the extent of his difficulty and the frequency of the training periods."—W. S. Hunter (Brown).
- 58. Foss, C. E., Nickerson, D., & Granville, W. C. Analysis of the Ostwald color system. J. opt. Soc. Amer., 1944, 34, 361–381.—Ostwald used the equation, W+B+C=1, to indicate that any chromatic color consists of three components whose sum is unity. The components are fractions of white, black, and full color, the full color being a chromatic element having no whiteness or blackness. A color solid was developed by Ostwald to describe any surface color in terms of the three components. This paper shows the manner in which the solid may be developed in modern colorimetric terms. It also shows the extent of the departures by the Ostwald system from actual measurements of surface color samples. 68-item bibliography.—L. A. Riggs (Brown).

59. Gillett, M. M. Seeing defects in nonreaders. Amer. J. Ophthal., 1944, 27, 1007-1010.—Psychological tests do not reveal eye defects which may be the essential factor in nonreaders; the school psychologist requires the co-operation of the ophthalmologist.—D. J. Shaad (Durham, N. C.).

60. Granville, W. C., & Jacobson, E. Colorimetric specification of the Color Harmony Manual from spectrophotometric measurements. J. opt. Soc. Amer., 1944, 34, 382-395.—Spectral apparent reflectance curves have been made for the 680 chips in the handbooks of the Color Harmony Manual developed by C. E. Foss on the basis of the Ostwald color system. From these reflectance curves, basic specifications have been computed in terms of the 1931 I.C.I. standard observer and Illuminant C. By comparison with other productions of the Ostwald system, the chips of the Color Harmony Manual approach most closely the ideal abridged Ostwald system specifications.—L. A. Riggs (Brown).

61. Gray, R. C. Incidence of colour-vision weakness. Nature, Lond., 1944, 153, 657.—The author has investigated the proposition of Vernon and Straker that colour-vision defect may be racially connected with pigmentation. Ten of the 138 men tested were colour-defective. "The number is small but the absence of any association of pigmentation or of physical type with colour-vision defect suggests that other possible causes of Vernon and Straker's interesting results should also be considered."—C. G. Mueller (Brown).

62. Hamilton, W. F., Briggs, A. P., & Butler, R. E. The testing of color vision in relation to vitamin A administration. Amer. J. Physiol., 1944, 140, 578-582.—With six students who were judged colorblind on the basis of the Ishihara test, further preliminary observations indicated that they could distinguish wave lengths normally. It was also observed that two complete dichromats did no worse with the Ishihara test than certain individuals whose wave-length discrimination was normal. Dubious improvement seemed to occur in wavelength discrimination and in Ishihara response under vitamin A administration.—T. G. Andrews (Chicago).

63. Ivy, A. C., Goetzl, F. R., & Burrill, D. Y. Morphine-dextroamphetamine analgesia: the analgesic effects of morphine sulfate alone and in combination with dextroamphetamine sulfate in normal human subjects. War Med., Chicago, 1944, 6, 67-71.-Experiments on 21 students indicated that dextroamphetamine (a sympathicomimetic drug) enhanced the analgesic effect of morphine and counteracted in part the depression, as evidenced by the pain threshold, flicker fusion, and choice reaction-time tests. Weakness, drowsiness, and dizziness also decreased. Since morphine liberates epinephrine, its analgesic effect may be partly due to epinephrine, and dextroamphetamine may have an epinephrine-like action. Circumstances (e.g., distraction, physical effort), which have in common the power to release epinephrine, also raise the pain threshold. The combination of the two drugs may keep a patient pain-free and at the same time alert and ambulatory.—M. E. Morse (Baltimore, Md.).

64. Jones, L. A. The historical background and evolution of the colorimetry report of the Optical

Society of America.—Amer. J. Optom., 1944, 21, 317-333.—An abridgment is given of the report published in the journal of this society, 1943 (see 18: 410).—M. R. Stoll (American Optical Co.).

65. Jordan, S. M. Abdominal pain. Clinics, 1943-1944, 2, 1511-1541.—Jordan discusses the mechanisms of both viscerogenic and referred abdominal pain. The clinical characteristics, diagnostic considerations, evaluation, observation of the patient, his description of the pain, and methods of examination are reviewed. The sources of abdominal pain, which have eluded scientific diagnostic devices, may be revealed by a cleverly elicited history and evaluation of the patient as a human being; such a diagnosis may then require only confirmation by scientific equipment.—M. E. Morse (Baltimore, Md.).

66. Jostes, F. A. The Navy's program for rehabilitation of the war deafened. *Hearing News*, Wash., 1944, 12, 3 ff.

67. Judd, D. B. Symposium on the Ostwald color system. J. opt. Soc. Amer., 1944, 34, 353-354.— This is a foreword to a series of papers appearing in the July Journal (see 19: 58, 60, 77). The papers offer American readers an opportunity to become acquainted with a system of color classification which has been accorded a wide recognition in Europe, presenting both a factual summary and a critical evaluation of the Ostwald system.—L. A. Riggs (Brown).

68. Karpinos, B. D. Visual acuity of selectees and Army inductees. Hum. Biol., 1944, 16, 1-14.— The visual acuity of large numbers of white and colored selectees and Army inductees of all ages was compared. The mean ages for the two groups were 22.5 years for white and 23.2 years for colored. A larger proportion of individuals with normal vision in each eye was found among the younger groups, from either racial class, than from the older age group. A higher proportion of colored selectees had normal vision in each eye than white selectees, irrespective of age. These differences in normal vision between white and colored groups showed no decrease with age and tended to be somewhat larger in the older than in the younger age group. It is possible that diminution of visual acuity with age is slower among colored than among white individuals. The racial differences in visual acuity persist on all levels of vision, with the result that colored subjects with imperfect vision were superior to whites with imperfect vision. There is no indication as to whether the differences are due to genetic, occupational, or other social factors. F. A. Beach (American Museum of Natural History).

69. Langworthy, O. R., & Ortega, L. Sensory endings on gastric muscle. J. comp. Neurol., 1943, 79, 425-430.—Although physiologists have long maintained that a variety of visceral sensations arise in the muscular coats of hollow viscera, such as the stomach, they have never clearly demonstrated the receptor endings. In this paper the authors describe spindle-shaped nerve endings found throughout the muscular walls of the stomach which they believe to be capable of mediating the stomach sensations of hunger, distention, and pain.—C. P. Stone (Stanford).

70. Liddell, H. S. Animal behavior studies bearing on the problem of pain. Psychosom. Med., 1944, 6, 261-265.—The author reviews the work of other investigators in this field—Pavlov, G. S. Sutherland, S. L. Marcuse, A. U. Moore, and W. C. James. In general, the author emphasizes the need for departing from the purely mechanistic viewpoint and for considering the pain response as one factor in a Gestalt.—P. S. de Q. Cabot (United Drug, Inc.).

71. McCalmont, P. Helping the hard of hearing soldier at Deshon. Hearing News, Wash., 1944, 12, 10-14.

72. Melville, S. D. Color vision. Optom. Whly, 1944, 35, 793-796; 821-825; 828; 851-852; 854-855; 866; 877-880; 890.—A series of articles summarizing the known facts concerning color vision, its theories, tests, terminology, variations, and anomalies is presented, with a brief section on the treatment of colorblind individuals. The author concludes that memorization and brightness discrimination, rather than actual improvement in color sensation, probably account for the reported successes in the training of color-blind individuals.—D. J. Shaad (Durham, N. C.).

73. Moon, P., & Spencer, D. E. Aesthetic measure applied to color harmony. J. opt. Soc. Amer., 1944, 34, 234-242.—Color harmony may be evaluated in accordance with Birkhoff's assumption that aesthetic measure is equal to the number of elements of order divided by the complexity. To accomplish this evaluation, it is necessary to assign weights to the significant elements of order and complexity. Such factors as identity, similarity, contrast, and ambiguity have been considered significant and have been weighted on the basis of experiments with the Munsell color chips. Sample deductions from such experiments are the following: Grays may be arranged to give as high an aesthetic measure as chromatic colors. Constancy of hue is often desirable, but constant value tends to lower the aesthetic measure. Simple designs with relatively constant hue and constant chroma are often more desirable than complicated designs with many hues.—L. A. Riggs (Brown).

74. Sloan, L. L. A quantitative test for measuring degree of red-green color deficiency. Amer. J. Ophthal., 1944, 27, 941-949.—A method of measuring color vision on a quantitative basis, using 8 colors presented with controlled, varied intensities, is described for use in classification of air force personnel.—D. J. Shaad (Durham, N. C.).

75. Smith, J. R. Thoracic pain. Clinics, 1943-1944, 2, 1427-1459.—The clinical features and differential diagnoses of pain arising from the structures of the chest wall, the respiratory and cardiovascular systems, mediastinum, and esophagus are described and interpreted in the light of pathological physiology.—M. E. Morse (Baltimore, Md.).

76. Wald, G., & Burian, H. M. The dissociation of form vision and light perception in strabismic amblyopia. Amer. J. Ophthal., 1944, 27, 950-963.—Examination of light sensitivity in cases of strabismic amblyopia revealed no variation from normal in the absolute thresholds, foveal and peripheral, for light and dark adaptation. The fact that form discrimi-

nation may be very low in strabismic amblyopia indicates that the two functions are dissociated.— D. J. Shaad (Durham, N. C.).

77. Zeishold, H. Philosophy of the Ostwald color system. J. opt. Soc. Amer., 1944, 34, 355-360.

—For Ostwald, the measurement of color consists first in establishing an equality between two perceptions. This psychological process must be based, however, upon the psychophysical facts of luminous reflectance. Black, white, and chromatic color are used in combination to secure any desired and measurable reflectance color. A color solid is developed as an aid in achieving such combinations.

—L. A. Riggs (Brown).

[See also abstracts 15, 89, 91, 92, 108, 138, 207, 225.]

#### LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

78. Hamilton, H. C., & Harned, B. K. The effect of the administration of sodium bromide to pregnant rats on the learning ability of the offspring: III. Three-table-test. J. Psychol., 1944, 18, 183-195. — Four groups of Wistar albino rats were given 18 trials, one a day, on the Maier 3-table-test. The groups consisted of a control group (N = 30) of offspring of normal rats, and three groups (N = 33, 30, 34) whose mothers had been dosed respectively with 40, 80, and 120 mgm. per kgm. of body weight per day of sodium bromide from the third through the twentieth day of gestation. All groups by blood test showed a normal concentration of bromide for at least 40 days before experimentation at 106 to 124 days of age. The bromide groups showed significantly poorer "pass" scores, error scores, and time scores, and greater variability of time and error scores than the control group. Differences were not significant between the various bromide groups. Thus bromide dosage of mothers was judged to have a persisting adverse effect on a "higher order nervous process" in their offspring.—R. B. Ammons (Iowa).

79. Huntington, E. Season of birth and fame. J. genet. Psychol., 1944, 64, 323-328.—The disagreement between the author's (see 12: 2371) and Pintner and Forlano's data (see 17: 806) on season of birth and fame does not seem to be fundamental. It is pointed out that the groups considered may show the influence of differential selection. There is considerable evidence that season of first births seems to differ from that of later births and that fame seems to be related to birth order. Possibly personal vigor as influenced by season of birth determines the incidence of success among seasonal groups equal in ability. The kind of curve shown by Pintner's data is associated with relatively high standards of living.—R. B. Ammons (Iowa).

80. Marx, M. H. The effects of cumulative training upon retroactive inhibition and transfer. Comp. Psychol. Monog., 1944, 18, No. 2. Pp. 62.—Five equated groups of rats learned a difficult water maze and then had training on 0, 1, 4, 8 or 12 simple water mazes over a 15-day period. Retention tests (recall and relearning) were given to determine the relation between the amount of interpolated learning and

degree of interaction. Other groups were trained on 0, 1, 4, 8 or 12 of the simpler mazes before learning the complicated one. This was to determine the relation between retroaction and transfer value of the interpolated maze problems. The chief outcomes were: Cumulative transfer occurred when several mazes were learned in succession. Retroaction was greater in terms of recall than in terms of relearning. It failed to increase with every increment of inter-polated learning. Retroaction increased when from 0 to 8 problems were interpolated, but it then decreased when 12 problems were interpolated. The degree of interaction was not especially related to transfer value of the problems which produced it. The decline in retroaction with 12 problems seemed attributable to positive transfer from the interpolated problems to relearning. Failure of retroaction to increase progressively with the continuous accumulation of additional amounts of interpolated training suggests limitations on the view that for-getting is a function of interpolated learning. 36-item bibliography.— N. L. Munn (Vanderbilt).

81. Montague, H. F. The method of infinite descent and the method of mathematical induction. Phil. Sci., 1944, 11, 178-185.—The so-called method of infinite descent is employed in mathematics as a form of the reductio ad absurdum. It is unhappily named, for it depends upon the principle that in the case of positive integers there can be no infinite descent. Mathematical induction is also unhappily named. Indeed, both those who believe that all mathematics is deductive and those who believe that mathematics is not all deductive agree that so-called mathematical induction is purely deductive. The author, however-accepting Smart's definition of induction as reasoning "from data concerning the behavior of certain apparently unrelated and quite dissimilar objects or phenomena . . . to the formulation of a general law which binds these diverse objects or phenomena together into a system" maintains that there are instances of true induction in mathematics. As an example, she gives an account of the synthesis of the theory of inversion and of quadratic transformations effected by Luigi Cremona.—R. H. Dotterer (Pennsylvania State College).

82. Ritchie, B. F. Spatial learning and goal location. Psychol. Bull., 1944, 41, 587.—Abstract.

83. Spaet, T. Solution by rhesus monkeys of problems involving second order sign behavior with inter-modal cues. J. genet. Psychol., 1944, 64, 175-184.—"1. Two rhesus monkeys were trained to respond to a green T regardless of position, upon presentation of short sounds from a buzzer, and to respond likewise to a brass push button after a long sound from a bell. 2. Both subjects attained an accuracy of performance of at least 80 per cent correct responses in 100 consecutive trials within 2300 training trials. 3. The data obtained present evidence for a multi-factor interpretation of learning emphasizing the subordination of incorrect response tendencies."—R. B. Ammons (Iowa).

84. Werner, H. Development of visuo-motor performance on the marble-board test in mentally retarded children. J. genet. Psychol., 1944, 64, 269-279.—Twenty-five mentally retarded children at

each of four mental age levels, 7.0-8.0, 8.1-9.0, 9.1-10.0, and 10.1-11.0, were given a test requiring the duplication of 6 mosaic forms on a marble-board. Number of correct performances showed a significant increase with increasing MA. An analysis of attack shows an increase with MA of the "constructive" performance, i.e., enclosing the form from two sides, and a decrease of "continuity-type," where marbles are placed in a continuous sequence. A highly articulate form organization, consisting of building a complex pattern out of its components, increases in incidence with MA, while performance guided by lines rather than form decreases. This "signifies a shift of dominance of guiding factors from the kinaesthetic to the visual field."—R. B. Ammons (Iowa).

[See also abstracts 8, 45, 104, 105, 106, 196, 243, 251, 259, 271, 289, 290.]

#### MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

85. Carpenter, C. R. Characteristics of gibbon behavior. (Film.) State College, Pa.: C. R. Carpenter, 1944. 380 ft. 16 mm. Sound. \$25.—The film is organized about the hypothesis that the evolution of human posture and associated fundamental behavior patterns has progressed in locomotion from ground-living (pronograde), prehuman types to arboreal swinging (brachiating) types and back to ground-living forms with semierect or erect postures. The film is illustrated, in the beginning, by Gregory's skeleton drawings of this evolutionary sequence. The gibbon, as a representative of the arboreal or brachiating stage in human evolution, is shown in detail. Patterns of arboreal locomotion, with special emphasis on swinging, are fully illustrated by slowmotion photography and described in the commentary. Likewise, walking of the gibbon is analyzed, and attention is focused on the man-like characteristics of this behavior. Grasping and manipulation while grooming and feeding are shown. Facts are given in the commentary about food preferences and social relations of this monogamous ape. Final scenes are of the gibbon in a natural setting. A concluding sequence depicts locomotor capacities of the gibbon and summarizes the theme of the picture. -C. R. Carpenter (State College, Pa.).

86. Coppez, L. Nystagmus, 1939. Ophthalmologica, 1943, 105, 107-119.

87. Dispensa, J., & Hornbeck, R. T. Maternal therapy and psychosomatic attributes of offspring. J. Psychol., 1944, 18, 151-158.—Douches of a neutral 1% solution of chloramine T and a 2% solution of sodium thiosulfate were administered to female Norway albino rats shortly before mating. Groups of offspring (N=33 to 52) of treated females did not differ significantly from controls in mazerunning performance. Albino females of genetic constitution "aacchh" were mated with "aaCchh" hooded males after treatments including douches of 1 and 2% chloramine T, 2% sodium thiosulfate, 2% lactic acid, and 6% sodium bicarbonate and constant current administered by both vaginal cathode and vaginal anode. The only deviation from antici-

pated color and sex ratios in the various groups of offspring (N=88 to 365) was in the case of the offspring of the females receiving the 6% sodium bicarbonate douche, where somewhat more hooded female offspring were born (CR, 2.78).—R. B. Ammons (Iowa).

88. Forbes, G. A review of the tests for drunkenness at present in use. Police J., Lond., 1944, 17, 188-197.—"From this review it is quite obvious that while statistically there is a close correlation between the concentration of alcohol in the tissues and the clinical condition, the fact of individual susceptibility is so serious that it is highly improper to establish a fixed level of blood or urinary alcohol above which an individual is to be judged unfit to drive."—G. S. Speer (Central YMCA College).

89. Guibor, G. Phenomena associated with eccentric fixation; a case report. Amer. J. Ophthal., 1944, 27, 986-991.—Disturbances classified as motor, visual, and proprioceptive are described in a case of convergent strabismus in which eccentric fixation was demonstrated.—D. J. Shaad (Durham, N. C.).

90. Halperin, S. L. Three pedigrees of microcephaly; with a note on their genetic implications. J. Hered., 1944, 35, 211-214.—A factorial analysis of sibships, for which microcephaly has been reported in widely scattered literature, suggests that numerous cases of microcephaly are recessively inherited. Parental consanguinity may account for more than 10% of the cases of congenital microcephaly. Three pedigrees and two photographs accompany the article.—G. C. Schwesinger (War Relocation Authority).

91. Hummel, D. G. Hand-eye relationships—a case report. Amer. J. Optom., 1944, 21, 314-316.—Soon after undertaking to learn to write with her left hand, the subject began to complain of ocular headaches, lacrimation, fatigue, and photophobia, apparently associated with use of her eyes. The author attributes relief of these symptoms to resumption of the natural habits of right-handedness rather than to the moderate refractive correction.—M. R. Stoll (American Optical Co.).

92. Loeckle, W. E. Über die Wirkung von Schwingungen auf das vegetative Nervensystem und die Sehnenreflexe. (The effect of vibration on the vegetative nervous system and the tendon reflex.) Luftfahrtmedizin, 1941, 5, 305-316.

93. Montagu, M. F. A. Animal and human inheritance. Psychiatry, 1944, 7, 253-256.—Discussing the possibility that the acquisition of the power of speech accelerated the evolution of the cerebral cortex, the author concludes (1) that speech as a social institution furnished an environment favoring mental superiority and (2) that, since man has always been characterized by speech, he has therefore been better equipped than other animals to meet a complex environment and hence has been more likely to reproduce.—M. H. Erickson (Eloise Hospital).

94. Morgan, M. W. The clinical aspects of accommodation and convergence. Amer. J. Optom., 1944, 21, 301-313.—A comparison of data on 50 subjects who were examined by clinical procedures and by the haploscopic method leads to the conclusion that clinical methods of examining positive and

negative relative accommodation yield results which are too high by some unpredictable amount. Data on 800 subjects were correlated as a means of investigating relationships between different clinical The ratio of accommodation to measurements. accommodative-convergence alone showed no correlation with any other function measured, a fact which is interpreted as indicating that this is an innate reflex relationship, independent of refractive error or any other visual function. Haploscopic measure-ments and analysis of clinical data agree in indicating that there can be no accommodation without some accommodative convergence but that there is no reflex stimulation of accommodation when convergence is called into play. Awareness of nearness of the target may stimulate convergence but does not appear to act as a stimulus to accommodation. M. R. Stoll (American Optical Co.).

95. Mutch, J. R. The lacrimation reflex. Brit. J. Ophthal., 1944, 28, 317-336.—Clinical and experimental observations indicate that reflex lacrimation is unilateral and can be inhibited by surface anesthesia of the conjunctiva and cornea, by section or paralysis of the ophthalmic division of the 5th nerve, or by section of the 5th nerve. Psychical weeping is bilateral and cannot be inhibited by surface anesthesia or paralysis of the 5th nerve or section of the cervical sympathetic nerve. No interference with reflex or psychical lacrimation results from either unilateral or bilateral section of the cervical sympathetic chain in the neck.—R. J. Beitel, Jr. (Dartmouth Eye Institute).

96. Reik, T. A psychologist looks at love. New York: Farrar & Rinehart, 1944. Pp. xviii + 300. \$3.00.—The author presents his views of the concepts of love, sex, and their interrelationships, and of the nature and character of their manifestations. Representative chapters treat love and sex, the theory of narcissism, the ego-model and ego-ideal, loving and being loved, parents and children, and the spirit of brotherhood.—M. H. Erickson (Eloise Hospital).

97. Romano, J., Engel, G. L., Ferris, E. B., Ryder, H. W., Webb, J. P., & Blankenhorn, M. A. Problems of fatigue as illustrated by experiences in the decompression chamber. War Med., Chicago, 1944, 6, 102-105.—The experiences of 43 adults exposed repeatedly to simulated altitudes of 35,000 ft. reveal 3 types of fatigue: muscular aches, occurring in all, inversely related to decompression sickness, and disappearing with training; fatigue related to boredom during long uneventful exposures; and a more complex emotional type unrelated to the other two. The last began a few hours after descent, continued 1-3 days, was not always relieved by rest, but diminished with experience. It was characterized by tenseness, irritability, restlessness, sleep disturbances, and disinclination to work. It mirrored the individual's previous pattern of behavior in anxiety situations. Laboratory data, the EEG's, and circulatory changes were not correlated with any type of fatigue. Fatigue induced by simulated high altitudes does not differ essentially from that experienced in civilian or military life. Emotional flexibility, types of psychologic defenses, the magnitude of the danger provoking anxiety, the suddenness of the experience,

identification with the group, and motivation are important determinants of fatigue.—M. E. Morse (Baltimore, Md.).

98. Ross, P. S., & Allen, R. O. Electronarcosis. Anesthesiology, 1943, 4, 630-636.—This report gives a short review of the history and theory of electronarcosis as observed in animal subjects, with some exploratory results with dogs. Optimal results were obtained with 10 volts interrupted 100 to 120 times per second. Rectangular pulses were used with the cathode on the head. Currents of from 2 to 10 milliamperes were explored. The proper values for narcosis were rather near to lethal values.—S. R. Hathaway (Minnesota).

99. Shock, N. W. Homeostatic adjustments after exercise. I. Acid-base equilibrium of the blood. J. gen. Physiol., 1944, 27, 143-154.—Twelve male subjects, aged 18-24 years, twice performed either of two forms of equated exercise, namely, stair climbing or arm exercise on a bicycle ergometer. The extent of the changes and rate of recovery of acid-base balance of the blood were determined and related to other physiological measures. The results showed: (1) displacement of acid-base equilibrium is "along the fixed acid path" similar to that produced by ingestion of acidifying agents; (2) recovery from metabolic acidosis is more rapid (10 times) after exercise than from acidosis produced by ammonium chloride, although the acidosis is greater after exercise; (3) maximum displacement of acid-base equilibrium occurs 7-10 minutes after cessation of exercise, at which time over 50% of the displacement in oxygen consumption, respiratory volume, and blood pressure have disappeared; and (4) after exercise the pH of the serum returns to normal values more rapidly than does the bicarbonate content.-L. C. Mead (Tufts).

100. Silverman, J. J., & Powell, V. E. Studies on palmar sweating. III. Palmar sweating in an Army General Hospital. Psychosom. Med., 1944, 6, 243-249.—By means of a colorimetric technique, the palmar sweating of 1,160 patients coming from medical, surgical, and neuropsychiatric wards of an Army General Hospital was studied along with similar responses of 100 patients, discharged from the Army because of disability, and the responses of a group of 71 hospital staff members. Either a strong or intense palmar sweat response was obtained from 83% of the 1,160 patients. Excessive sweat reactions were found most frequently in patients with a diagnosis of psychoneurosis. "The palmar sweat response has important clinical significance especially when it is looked upon as a cholinergic phenomenon related particularly to emotional activities."—P. S. de Q. Cabot (United Drug, Inc.).

101. Stern, H. J. A simple method for the early diagnosis of abnormalities of the pupillary reaction. Brit. J. Ophthal., 1944, 28, 275-276.—If a fine pinpoint light is projected on the eye with the slitlamp in such a way that it just enters the pupil near the margin of the iris, the pupil contracts. The iris margin moves towards the center of the pupil and prevents the light pencil from entering the pupil. As no light now reaches the retina, the stimulus for the contraction of the pupil is no longer present; the pupil then dilates and thus again allows the light

pencil to reach the retina. The whole mechanism starts again. This artificial hippus continues regularly in a normal eye so long as the light pencil enters the pupil. The pupil contracts and dilates 10 times in 7 to 8 seconds (0.7 to 0.8 second for one cycle of the hippus), a reaction which can easily be measured by stopwatch. Since the cycle consists of (1) the latent period, (2) the shortened contraction time, and (3) the redilatation, a disturbance of any one of these three periods would be expected to slow down the hippus. In the cases of latent syphilis, early tabes, etc., with clinically normal pupillary reaction, the artificial hippus could never be produced by the slit-lamp.—R. J. Beitel, Jr. (Dartmouth Eye Institute).

102. Swingle, W. W., & Remington, J. W. The role of the adrenal cortex in physiological processes. Physiol. Rev., 1944, 24, 89-127.—At the risk of oversimplification, it may be said that the adrenal cortex has two pre-eminent functions, each regulated by a distinct type of steroid hormone. The first is concerned with regulation of electrolyte and fluid balance, acting directly on the renal tubules to allow them to conserve sodium and water and release potassium. It perhaps regulates also electrolyte partitioning across cell membranes in general. second function is concerned with the intermediate metabolism of protein and carbohydrate, and its failure leads to decreased energy metabolism in all An amorphous fraction remains after tissues. separation of the cortical steroids, but little is known about it except that it is very potent in the maintenance of life. A list of 531 references from the literature since 1930 is appended.—M. E. Morse (Baltimore, Md.).

103. Taylor, C., & Brown, G. E. Some observations on the validity of the Schneider Test. J. Aviat. Med., 1944, 15, 214-230.—The authors review the "literature on the use of the Schneider Index to detect (a) the effects of fatigue, (b) physical fitness, (c) the effects of minor infections and convalescence, and (d) psychoneuroses." It is concluded that "statistical support for the validity of the Index in measuring these effects is afforded only by group comparisons, and in no case is there evidence that the Index can reliably be employed to detect these conditions in the individual." An analysis of 325 Schneider tests made by the authors on healthy young men supports this conclusion.—A. Chapanis (U. S. Army Air Forces).

104. Tecoz, H. F. L'instinct et l'intelligence. (Instinct and intelligence.) Praxis, 1943, 32, 492; 534.

105. Thorndike, E. L. The causation of fraternal resemblance. J. genet. Psychol., 1944, 64, 249-264. —The heights of 409 pairs of brothers attending Columbia College show a raw correlation of .50  $\pm$  .025; weights, .37  $\pm$  .029; intelligence scores, .41  $\pm$  .028; and age at entrance to college, .56  $\pm$  .023. Corrected for use as estimates of the relationships obtaining in the general population, these become .56 for height, .41 for weight, .73 for intelligence-test scores, and .84 for age at entrance. For 812 pairs of siblings in a city school, the raw correlation of "age in the same grade" was .20, and of intelligence-test scores, .43; while in a second school group, 486 pairs

showed corresponding correlations of .23 and .40. "Weight is presumably more subject to home environment than height is; and age at entrance to college is subject to parental wealth and pressure to do well in school more than test-score is." The author concludes: "On the whole the facts reported here are very damaging to all doctrines that attribute great influence to home environment. Our siblings actually showed less resemblance in weight than in height and (except for the Columbia pairs of brothers) in rate of progress in school than in intelligence-test score."—R. B. Ammons (Iowa).

106. Thorndike, E. L. The resemblance of siblings in intelligence-test scores. J. genet. Psychol., 1944, 64, 265-267.—Four hundred nine pairs of brothers among students in Columbia College showed a raw correlation of .41. Applying this figure to an estimate of the correlation in the general population, it is likely that the scores of siblings in general correlate .73. The scores of 812 and 486 pairs of siblings in different school systems correlated .45 and .435 (after correction for attenuation), respectively. Estimates from this data give correlations for siblings in the general population of .77 and .70. From this and other studies, it appears that sibling correlation in intelligence is .70 or higher, rather than below .50. This puts a new light on the measurement of the relative contributions of heredity and environment in producing the resemblance of siblings.—R. B. Ammons (Iowa).

107. Wald, G., & Jackson, B. Activity and nutritional deprivation. Proc. nat. Acad. Sci., Wash., 1944, 30, 255–263.—Experimental rats were individually housed in activity cages during respective bulk-food (natural and synthetic), water, thiamin, ribo-flavin, and magnesium ion deprivation periods. The study reveals, in light of its controls, that increased activity is not always present under these conditions and that "high running is not a reliable sign of well being." In fact, augmented activity is a sign of want and shows the basic reaction to deprivation to be locomotion "regardless of sensations or external inducements." Deprivational effects accordingly are held a likely behavioral basis for mammalian emigrations.—L. A. Pennington (U. S. Naval Reserve).

108. White, J. W. Clinical application of the screen (cover) test described in detail. Amer. J. Ophthal., 1944, 27, 977-986.—Detailed instructions for the use of the cover test for measurement of imbalance of the ocular muscles are given. Variations of the test, including the screen-Maddox rod, and screen comitance tests are described.—D. J. Shaad (Durham, N. C.).

[See also abstracts 33, 36, 42, 50, 63, 76, 78, 79, 111, 115, 132, 133, 138, 139, 157, 160, 200, 225, 229, 235, 271, 282, 285.]

#### PSYCHOANALYSIS, DREAMS, HYPNOSIS

109. Bernfeld, S. Freud's earliest theories and the school of Helmholtz. Psychoanal. Quart., 1944, 13, 341-362.—The historical origins of Freud's theories are discussed in relation to the work of Breuer and the influence of Brücke and others of the Helmholtz school of physiology. 36-item bibliography.—M. H. Erickson (Eloise Hospital).

110. Boeszoermenyi, Z. Beiträge zur Psychopathologie der Schmerzhalluzination. (Contributions to the psychopathology of pain hallucination.) Mschr. Psychiat. Neurol., 1942, 106, 243-252.

111. Fenichel, O. Remarks on the common phobias. Psychoanal. Quart., 1944, 13, 313-326.— Discussion is offered of common phobias as often representing aggressive impulses, early frustrations, or unconsciously feared punishment, but most frequently a combination of an unconscious temptation with an anticipation of punishment. A factor common to all phobias is regression, but the gains of this regression are secondary in that the individual is not striving for the helplessness of childhood but rather is seeking the relative security of being protected by adults. The neurotic helplessness which the patient experiences as loneliness and lack of human contact derives from remobilization of infantile instinctual conflicts. Various typical common phobias are discussed in detail.—M. H. Erickson (Eloise Hospital).

112. Fliess, R. Knocking on wood; a note on the precedipal nature of the magic effect. Psychoanal. Quart., 1944, 13, 327-340.—The application of psychoanalytical concepts for the interpretation of the modern magical ritual of knocking on wood discloses that such a ritual temporarily abolishes the fear of castration or death by discharging symbolically precedipal strivings of an ambivalent oral character. Clinical material cited from two patients substantiates this conclusion.—M. H. Erickson

(Eloise Hospital).

113. Thompson, C. Ferenczi's contribution to psychoanalysis. Psychiatry, 1944, 7, 245-252.—A brief summary is given of the personal relations between Ferenczi and Freud to explain why the former's original contributions to psychoanalysis were either not published or published in a censored form. Discussion is then given of Ferenczi's two positive contributions to psychoanalysis. The first of these was the concept of the analytic situation as a human situation in which two human beings are attempting to establish a sincere relationship necessarily affected by what they bring into it. The second contribution was the concept that the analyst must give the patient the love that he needs. There follows a discussion of Ferenczi's technique requiring the dramatic reliving with the analyst of childhood experience as a measure of making the analysis an emotional rather than simply an intellectual experience, together with the difficulties and dangers entailed.—M. H. Erickson (Eloise Hospital).

#### [See also abstracts 122, 123, 169.]

#### **FUNCTIONAL DISORDERS**

114. Ackerman, N. W. Psychotherapy and "giving love." Psychiatry, 1944, 7, 129-137.—Too often the giving of love to the patient in the psychotherapeutic situation is misconceived and abused as a technical procedure or a strategy, and it is not recognized as the proper outcome of the development of certain inter- and intrapersonal relationships. Clinical material is discussed to demonstrate that the

first objective of therapy is the growth of understanding between the child and therapist, which in one sense is simply an expansion of self-understanding. The aim is to enable the patient to become ready to receive love as love. The therapist is at liberty to give love providing the giving is genuine and not forced behavior. When the patient is able to ask for love, he is developing the capacity to give it and hence is establishing his adjustments, and the therapist's task of preparing the patient for love is reaching its end.—M. H. Erickson (Eloise Hospital).

115. Allen, E. B. Emotional factors in alcoholism. N. Y. St. J. Med., 1944, 44, 373-378.—The moderate drinker does not wish to change his emotional status materially, but the alcoholic is afraid to betray his insecurity and thus overcompensates by boasting of the satisfactions derived from alcohol. The craving for alcohol is, however, more a craving for the habit pattern which relieves inferiority feelings than for anticipated sensuous enjoyment. Drinking is of relatively little concern when there is no danger of exposing weakness in competition with others. Alcoholics can be successful if they will remain within their limitations; they do better in subordinate roles, in occupations in which they can be content with their exertions.—M. E. Morse (Baltimore, Md.).

116. [Anon.] Holmes as a psychiatrist. New Engl. J. Med., 1944, 230, 155.—Until recently little attention has been paid to O. W. Holmes's interests in mental aberration and clinical psychiatry. He was, however, a profound student of psychiatry and its social significance and had advanced ideas on mental mechanisms. Possibly hesitant about presenting his thoughts before his colleagues, he chose the medium of the novel to publicize his ideas. Elsie Venner (1859) and The Guardian Angel (1867) give an insight into his deep psychiatric understand-ing. In 1871 he addressed the Harvard chapter of Phi Beta Kappa on Mechanism in Thought and Morals, but he published the paper in Pages from an Old Volume of Life only in 1892, and then only after revision and annotation. Its theories are strangely similar to those of Freud. Holmes believed that a material record of thought persisted in the brain but that it was not always available for control of behavior-"thoughts which never emerge into consciousness, which yet make their influence felt among the perceptible mental currents."—M. E. Morse (Baltimore, Md.).

117. Binnie, C. G. Speech defects and mental health. School, 1943, 32, 219-221.—G. S. Speer (Central YMCA College).

118. Blanton, S. Contribution of modern psychiatry to the physician and surgeon. N. Y. St. J. Med., 1944, 44, 177-179.—The average child's conflicts may eventuate in physical illness, neuroses, or psychoses, and most of the attitudes which make for health or sickness spring from the unconscious. In any illness a normal person regresses somewhat, and after a serious illness he requires definite retraining to regain his adult level. Every illness, mental or physical, is based on three factors: the organism inherited, the childish pattern, and the present situation. The outcome depends, to some extent, on the will to live, which in turn depends on whether the

patient feels loved and needed.—M. E. Morse (Baltimore, Md.).

119. Bossard, J. H. S. The mental hygiene of owning a dog. Ment. Hyg., N. Y., 1944, 28, 408-413.—Thirteen ways in which dogs as pets contribute to mental hygiene are outlined.—W. L. Wilkins (U. S. Naval Reserve).

120. Bowman, K. M. Psychiatry at war. Amer. Mercury, 1944, 9, 336-344.—This is an answer to H. C. Link's criticisms of military psychiatry (see 18: 3503). The author discusses Link's arguments in the light of accepted psychiatric principles, demands of the Army and Navy selection, and the available data on psychiatric classification. He feels that part of the problem of the general misconceptions and misinformation regarding psychiatry is due to terminology and to such related problems as "the human reaction of horror to psychiatric disease, the subtle confusion of early pathological symptoms with moral weakness or unethical behavior, and the false distinction between mind and body."—C. G. Mueller (Brown).

121. Chodoff, P. Sleep paralysis with report of two cases. J. nerv. ment. Dis., 1944, 100, 278-281.— Sleep paralysis is considered "a non-diagnostic symptom which may occur in narcolepsy or independently in otherwise healthy individuals." Two cases are used to illustrate the typical features.—L. B. Heathers (Smith).

122. Clark, R. A. Theosophical occultism and mental hygiene. Psychiatry, 1944, 7, 237-243.—
"Representative literature of theosophical occultism has been reviewed, five personal studies reported, and the opinion of psychiatric authorities cited concerning the dangers of theosophical cults and the reasons for their existence. It was concluded that the greatest need is for understanding why certain people are attracted by these cults, and for cooperation among churches, educators and medical men in helping the unstable, insecure, and hypochondriacal to better integration."—M. H. Erickson (Eloise Hospital).

123. Davison, C., & DeMuth, E. L. Disturbances in sleep mechanism (a clinicopathologic study). *J. nerv. ment. Dis.*, 1944, 100, 303-304.—Abstract and discussion.

124. Deutsch, F. Civilian war neuroses and their treatment. Psychoanal. Quart., 1944, 13, 300-312.— An account is given of the treatment of civilian war neuroses by the Psychiatry Clinic of the Boston Psychoanalytical Institute. From the 45 men and 16 women referred for treatment, the conclusion is reached that the civilian war neurosis is primarily a family neurosis centering around the individual directly involved in the military situation. Hence treatment must necessarily include the group of people whose equilibrium is disturbed. Ten brief case histories are cited, and discussion is offered of the essential considerations that must be met in furthering work of psychiatry clinics.—M. H. Erickson (Eloise Hospital).

125. Doty, E. J. The indexing of psychiatric records for clinical use and research. J. nerv. ment. Dis., 1944, 100, 282-288.—A method for indexing psychiatric records, in order to make their material

easily available for clinical and research purposes, is described. Two card files are maintained: one is a file of patients' data cards which list in a prearranged order the material in each case history; the other is a file of index title cards which list the records which contain material on any given topic.—L. B. Heathers (Smith).

126. Faris, R. E. L. Reflections of social disorganization in the behavior of a schizophrenic patient. Amer. J. Sociol., 1944, 50, 134-141.—The abnormal behavior of the subject of this study is shown to be not really mental "disorder" but actually an elaborate and orderly system of thought, privately worked out as a solution to a number of severe life-problems. The sources of many of the elements in his psychosis are traced to material he had read in an effort to resolve these difficulties. Social disorganization plays a part in intensifying the personal problems and also in providing a social environment in which no con-ventional solutions are available and in which the private solution devised is unintelligible and unacceptable to other persons .- D. L. Glick (American University).

127. Fox, H. M. A variety of furlough psychosis. Psychiatry, 1944, 7, 207-213.—Four examples of acute brief psychotic episodes developing in soldiers on furlough from combat duty are discussed. conclusion is offered that certain acute psychotic developments occurring in the army constitute an especially valuable opportunity for the study of individual attitudes against the background of the comparative simplicity of army environment.—M. H. Erickson (Eloise Hospital).

128. Goodale, E. Intake interviews with relatives of psychotic patients. Smith Coll. Stud. soc. Work, 1944, 15, 15-50.—A psychiatric social worker interviewed relatives who accompanied patients to the Essex County (N. J.) Hospital immediately after the patients had been admitted. Interviews were directed at reducing relatives' emotional ten-sions by explaining the social psychiatric history, the functions of the social service department, routine hospital services, and court procedures. The time and informants for the social history were selected, and relatives were given an opportunity to ask questions and talk about the patient. The interviews are beneficial to both the relatives and the hospital. Twelve case histories are given.—M. R. Jones (U. S.

129. Haas, L. J. Practical occupational therapy for the mentally and nervously ill. Milwaukee: Bruce Publishing Co., 1944. Pp. xvi + 432. \$6.00. -Part I reviews history, aims, and methods of receiving patients and starting occupational therapy. Brief case histories illustrate adjustment problems and the adaptation of therapy to counteract depression or excitement, restore confidence, provide outlet for aggression, or give training in co-operation and new occupations. Part II treats the organiza-tion and management of a department, the planning of buildings, selection of equipment and staff, and problems of upkeep. Part III (chapters 15-38) describes in detail the crafts best suited to occupational therapy, with suggestions for making equip-ment and procuring raw materials.—C. M. Harsh (Nebraska).

130. Hanfmann, E., Rickers-Ovsiankina, M., & Goldstein, K. Case Lanuti: extreme concretization of behavior due to damage of the brain cortex. Psychol. Monogr., 1944, 57, No. 4. Pp. 72.—F. Lanuti (pseudonym), following severe brain injury, is the subject of this 9-year psychodynamic study, which catalogues data from experimental and clinical approaches and provides a descriptive-theoretical report of the effects of brain pathology, via dedifferentiation processes, upon the personality struc-The report yields information on Lanuti's "perception and recognition of objects, his use of symbols, memory, emotion, and imagination, as well as on his general adjustment to his defect,' including reactions to success and failure both in the laboratory tests and about the hospital. In all these spheres Lanuti is "limited to momentary action . . . is incapable of forming and maintaining stable frames of reference." Hence, "he presents in an extreme degree, the picture of concreteness of behavior which Goldstein considers characteristic of organic deterioration." Little, if any, improvement in performance is apparent during the 9-year period.—L. A. Pennington (U. S. Naval Reserve).

131. Henderson, J. L., & Moore, M. The psychoneuroses of war. New Engl. J. Med., 1944, 230, 273-278.—This is an analysis of 200 neuropsychiatric cases occurring under combat conditions in the South Pacific; 49% were anxiety neuroses, while 20% were hysteria. The most important predisposing factor was a distorted home, resulting in personalities too immature to deal with the problems of war. The usual pattern was an uninterested father and a mutually dependent neurotic relation between mother and child, which found a common outlet in worry and a helpless hostility toward the world. The son, having never dealt adequately with his outgoing impulses, was oriented receptively toward combat, already defeated. The killing of a friend, with whom he identified himself, often precipitated the breakdown. The patients' tendency to recount their dreams and experiences to one another appeared to be an attempt at group autopsychotherapy, and, as psychiatric resources were limited, it was encouraged. Practically, a man who has broken under battle stress is unsuited for combat, but much could be done for rehabilitation, avoidance of a defeated attitude, and furtherance of the war if selected patients, as a group, could be assigned to appropriate noncombat duties under psychiatric supervision .-M. E. Morse (Baltimore, Md.).

132. Hoch, P., Kubis, J. F., & Rouke, F. L. Psychogalvanometric investigations in psychoses and other abnormal mental states. Psychosom. Med., 1944, 6, 237-243.—An ink recording psychogal-vanometer was used to compare the psychogalvanometric reactions (PGR) of 100 psychotic patients and those of a normal control group of 100 adults of equivalent age and sex distribution. The findings, which indicated that improvement in mental conditions was correspondingly reflected in more normal PGR's, proved the value of this technique as an auxiliary in clinical diagnosis and illustrated the need for caution in interpreting psychogalvanometric readings of suspected criminals who might be psychotic or borderline cases.—P. S. de Q. Cabot (United Drug, Inc.).

133. Jellinek, E. M., Angyal, A., Cohen, L. H., & Miller, D. P. An experimental study of bromism. J. Psychol., 1944, 18, 235-258.—The blood serum levels of 78 normal and 20 psychotic subjects were raised to 100-200 mg. per cc. by oral administration of sodium bromide over a period of weeks. A series of psychiatric interviews and mental tests were given. The normal subjects showed some effects of sedation but no bromide psychosis; the psychotic subjects showed essentially the same reaction, except that two subjects gave evidence of mild intoxication. Even in a second group of 28 psychotics where serum bromide levels of over 200 mg. per cc. were reached, there was no considerable exacerbation of psychotic symptoms, although 57% showed signs of bromide intoxication. "It would seem, therefore, that some additional factors, beside the blood bromide level, may have been operative in those patients who figure in the literature as cases of bromism and bromide psychosis at bromide levels below 200 mg. per 100 cc. of serum."—R. B. Ammons (Iowa).

134. Karnosh, L. J., & Gage, E. B. Psychiatry for nurses. St. Louis: C. V. Mosby, 1944. Pp. 339. \$2.75.—In this second edition, the original textbook (see 15: 1770), which emphasizes the practical aspects of psychiatric nursing for student nurses, has been revised to permit inclusion of more recent psychiatric developments. These relate to electroencephalography, the Rorschach and other personality tests, concepts of psychosomatic medicine, electric shock therapy, and the new advances in the treatment of epilepsy.—M. H. Erickson (Eloise Hospital).

135. Kepecs, J. G. Neurotic reactions in parachutists. Psychoanal. Quart., 1944, 13, 273-299 .-A detailed discussion, illustrated by 5 case histories, is given of neurotic reactions in parachutists. In addition to history and ordinary interviews, the patients were studied by discussion and association under hypnosis and fantasies elicited by use of the Murray Thematic Apperception Tests. The conclusion reached was that all, or nearly all, parachutists feared jumping and that the essential conflict is between the desire to escape and the demands of duty and personal pride, with the gratification received from jumping intensifying this struggle. The occurrence and character of the neurotic reaction depend upon the individual's life experiences, which determine the form of reaction, and the traumatic situation. The latter includes actual physical injury or narrow escapes from danger which may befall either the individual himself or other jumpers. -M. H. Erickson (Eloise Hospital).

136. Klapman, J. W. Public relationships of the mental hospital. Ment. Hyg., N. Y., 1944, 28, 381-396.—Characteristic psychological reactions of relatives and friends of patients include: guilt projection over committing a patient, aggression from a sense of shame, neurotic and anxiety reaction patterns, oversolicitousness for and rejection of the patient. Conflict in attitudes of relatives tends to make the hospital obsequious. Advocated are group psychotherapy, the organization of relatives and recovered patients, an institution journal for relatives, and more regular visiting and consulting hours.—W. L. Wilkins (U. S. Naval Reserve).

137. Kolodney, E. Treatment of mothers in groups as a supplement to child psychotherapy. Ment. Hyg., N. Y., 1944, 28, 437-444.—Experience from the Jewish Board of Guardians shows that socialization of the mothers and mutual acceptance and tolerance can be expected as outcomes. Mothers who can benefit from group treatment include those with personality difficulties which prevent their participation in usual groups, those preoccupied with only familial matters, those resistive to individual treatment, and those who cannot enter into a close relationship with a therapist.—W. L. Wilkins (U. S. Naval Reserve).

138. Kutscher, M. Changes in optic function and ophthalmoscopic picture observed in 4 patients of the eunuchoid skeletal type who were being treated with an orchic extract. Arch. intern. Med., 1943, 72, 461-470.-Four patients having eunuchoid skeletal measurements (one of them with eunuchoidism, another with eunuchoidism and pituitary tumor), treated for 17 months to 21 years with injections of orchic extract, showed subjective improvement with feelings of well-being and diminished fatigue. Before treatment, all had decreased visual acuity, diminished accommodation, and contraction of the visual fields. During therapy, definite improvement was noted in visual acuity for distance and in amplitude of accommodation. The lesions in the eyegrounds disappeared, dark adaptation became normal, and contraction of the visual fields for form and color was reduced. Some improvement has also been observed in 3 additional patients given this therapy, who had optic atrophy associated respectively with syphilis, pituitary tumor, and retinitis pigmentosa.—M. E. Morse (Baltimore, Md.).

139. Langworthy, O. R., & Betz, B. J. Narcolepsy as a type of response to emotional conflicts. Psychosom. Med., 1944, 6, 211-226.—The authors present and discuss the histories of 6 patients having clinical manifestations of idiopathic narcolepsy. Previously narcolepsy has been studied by neurologists who thought that the sleep centers were involved through a lesion in the central nervous system. In cases of idiopathic narcolepsy, there are distinct indications of emotional disturbances with no signs of disease of the central nervous system. The treatment of narcolepsy with the administration of ephedrine and benzedrine has been unsatisfactory, for stimulants generally have offered only temporary symptomatic relief. A careful analysis of these cases shows that the syndrome of idiopathic narcolepsy is a personality reaction to emotional issues, with the symptoms appearing as neurotic defenses against primary anxieties "associated with difficulties in realistic adjustments in personal relationships with others. In the experience of the authors, such patients have been responsive to psychotherapy.—P. S. de Q. Cabot (United Drug, Inc.).

140. Menninger, W. C. Psychiatry and the army. Psychiatry, 1944, 7, 175-181.—The following topics are discussed: the problems and the difficulties of military psychiatry; the need for greater public education in relation to psychiatry, for closer participation of psychiatry with medicine and surgery, and for greater leadership by psychiatry in other fields of human behavior; the problems of postwar training

of psychiatrists; and postwar psychiatric problems.—

M. H. Erickson (Eloise Hospital).

141. Millet, J. A. P., & Mosse, E. P. On certain psychological aspects of electroshock therapy. Psychosom. Med., 1944, 6, 226-236.-Eleven cases are presented to illustrate certain psychological reactions to electroshock therapy, illustrating therapeutic considerations. Four different types of attitudes toward treatment were expressed: (a) urgent insistence, (b) strong objections, (c) apprehensive acceptance, and (d) passive submission. The patients' reactions are categorized according to whether they are combative, erratic, euphoric, placid, or startled. Generally the treatment resulted in the removal or lessening of pathological moods, whether it was one of elation or depression, while initiative, the return of self-confidence, and an impatience to get back into life were also noted. The authors present theoretical hypotheses to explain the selective influence of electroshock on the patients.-P. S. de Q. Cabot (United Drug, Inc.).

142. Möller, E. Über den Begriff des funktionellen und organischen in der Psychiatrie. (Concerning functional and organic conceps in psychiatry.) Acta psychiat., Kbh., 1943, 18, 1-44.

143. Olkon, D. M. Treatment of neuroses and mental and psychic disturbances of war and their prognosis. Dis. nerv. Syst., 1944, 5, 272-277.— The author gives a number of suggestions for the prevention and treatment of the less severe mental disturbances resulting from the soldier's life under war conditions, together with 14 specific injunctions. Medical therapy is discussed briefly. Prognosis is necessarily guarded because of the genetic predisposition to breakdown in these cases.—C. E. Henry (U. S. Naval Reserve).

144. Ramos e Silva, J. A dermatología e a medicina psicossomática. (Dermatology and psychosomatic medicine.) Hospital, Rio de J., 1944, 25, 863-875.—Of increasing significance are psychologically oriented interpretations of skin disorders, even apart from phenomena akin to conversion symptoms, etc. The new approach is by no means specific to dermatology but generally works from the functional disturbance to the organic disorder. Numerous varieties of skin disorders are discussed, such as the simulated and the psychogenic .- H. D. Spoerl (American International College).

145. Rodríguez, S. La mímica en la esquizofrenia. (Mimicry in schizophrenia.) Rev. Psiquiat. Disc. conex., 1943, No. 1.—[Abstracted review; original not seen.] Following Kretschmer's contention that a characteristic contraction of the frontal muscle is related to schizophrenia, the author discusses 70 cases from the point of view of this symptom. Physiognomical observations are limited to the forehead. It is suggested that the contraction may be due to cortical atrophy, which supposedly also affects personality.—H. D. Spoerl (American International College).

146. Schachter, M. El mongolismo; estudio 140. Schachter, M. El mongolismo; estudio clinico y medico social. (Mongolism; a clinical and medical-social study.) (Trans. by A. M. Garcia.) Madrid: Morata, 1943.—[Abstracted review; orig-inal not seen.] After a brief report of previous work on mongolism, the available statistical facts regard-

ing etiological factors are summarized. The relations to order of birth, sex, race, social status, abortions, and the use of contraceptives are considered. There is a discussion of the various theories of causation, such as endocrine imbalance, heredity, atavistic reversion, etc. Methods of diagnosis, treatment, and prognosis are also considered. Bibliography of 193 titles .- F. L. Goodenough (Minnesota).

147. Schafer, R. The significance of scatter in research and practice of clinical psychology. Psychol., 1944, 18, 119-124.—Scatter indicates the degree of harmony in a variety of mental functions. Scatter, as measured by a shortened form of Babcock's Efficiency Test, was analyzed for groups of normals (N = 54) and mentally diseased (N = 42) in three ways: (1) actual efficiency scores, with regard to which schizophrenics and neurotic and psychotic depressives were below normals; (2) differences between efficiency scores, where schizophrenics had repetiton efficiency scores much superior to their learning efficiency scores as compared with normals; and (3) differences between related subtest scores, where schizophrenics had relatively much lower scores on delayed recall than on immediate recall of a paragraph. All differences were found to be significant at approximately the 1 per cent level using the chi-square test.—R. B. Ammons (Iowa).

148. Shakow, D. Some types of military psychiatric casualties and the problem of rehabilitation. *Psychol. Bull.*, 1944, 41, 584.—Abstract.

149. Slavson, S. R. Group therapy at the Jewish Board of Guardians. Ment. Hyg., N. Y., 1944, 28, 414-422.—The outcome of 10 years of group therapy experience is reviewed, and features of the program with different age groups are discussed.—W. L. Wilkins (U. S. Naval Reserve).

150. Spiegel, L. A., & Oberndorf, C. P. Narcolepsy as a psychogenic symptom. J. nerv. ment. Dis., 1944, 100, 304-309.—Abstract and discussion.

151. Stainbrook, E. The Rorschach description of immediate post-convulsive mental function. Character & Pers., 1944, 12, 302-322.—Fifty psychiatric patients undergoing electroshock treatment served as subjects. A composite Rorschach psychogram for each 5-minute period in the hour following treatment was constructed for each subject. Changes in frequency and quality of various Rorschach indices, such as low number of responses, poorly conceptualized form, and whole concepts confabulated from part of a blot, were characteristic of various stages of recovery.—M. O. Wilson (Oklahoma).

152. Steur, E. I. Über das Nichterkennen des eigenen Spiegelbildes. (Concerning failure to recognize one's own mirror image.) Mschr. Psy-

chiat. Neurol., 1942, 106, 294-310.

153. Stone, C. P. Glossary of technical terms for beginning students in abnormal psychology, mental hygiene and medical social service. Calif.: Stanford University Press, 1944. Pp. 15. \$0.25.—A. B. Hunter (Brown).

154. Sullivan, E. B. A study of selected cases of aphasia. Psychol. Bull., 1944, 41, 589.—Abstract.

155. Tredgold, A. F. Manual of psychological medicine for practitioners and students. Baltimore: Williams & Wilkins, 1943. Pp. xi + 298. \$5.00.—
This book is a brief presentation of English psychiatry, intended for practitioners and students. It constitutes a general survey of the entire field of psychiatry including psychotherapy, legal considerations and procedures, and duties of the practitioner.

—M. H. Erickson (Eloise Hospital).

156. Weldon, A. S. The social service department in a mental hospital. Dis. nerv. Syst., 1944, 5, 268-271.—The author gives a brief historical review of the need for and development of the profession of psychiatric social work.—C. E. Henry (U. S. Naval Reserve)

157. Ziegler, L. H. Psychoneuroses in war time. Ann. intern. Med., 1943, 18, 941-948.—Ziegler reviews briefly the types of psychoneuroses encountered among civilians and soldiers in war time. He also considers unstable states in reaction to difficult decisions and abnormal fatigue, both of which, although not psychoneuroses, are of great practical importance in military life.—M. E. Morse (Baltimore, Md.).

[See also abstracts 7, 19, 54, 90, 100, 170, 172, 182, 195, 208, 212, 213, 227, 230, 234, 236, 252, 279, 280, 284, 295, 297.]

#### PERSONALITY AND CHARACTER

158. Bychowski, G. Personality changes characterizing the transition from civilian to military life. J. nerv. ment. Dis., 1944, 100, 289-296.—Emotional problems produced or accentuated by the change from civilian to military life may lead to personality changes. Possible motivational bases for traumatic experiences are such fears as that of facing a new situation, of having to leave and perhaps lose the mother, of suffering physical injury, of being faced with homosexual temptations or with reduced opportunities for the satisfaction of narcissistic needs.—L. B. Heathers (Smith).

159. Chein, I. The awareness of self and the structure of the ego. Psychol. Rev., 1944, 51, 304-314.—As a point of departure it is noted that Allport, in The Ego in Contemporary Psychology, suggests that the ego is acting in several, if not all, of his eight capacities. Although everything seems to point to one unitary ego, Allport does not indicate what it might be. The author attempts to define this unitary ego in terms of "a structured set of interrelated motives centering about the awareness of self." He then examines Allport's main conceptions of the ego and his four points concerning the nature of the ego to see how they fare in terms of the author's theory. The conclusion is that the "ego is a motivational-cognitive structure built up around the self."—M. A. Tinker (Minnesota).

160. Conrad, K. Der Konstitutionstypus als genetisches Problem; Versuch einer genetischen Konstitutionslehre. (The constitutional type as a problem in genetics; essay on a genetic constitutional theory.) Berlin: Julius Springer, 1941. Pp. 280. RM 21.—[Abstracted review; original not seen.] Emphasis is placed upon mixed constitutional types, the boundaries between normal and abnormal body build, and the problem of a standard for measuring types. In the first part of the book the

author discusses what he calls primary variations; these occur around the polar types pyknic and leptomorph. The next major part deals with secondary variations. Here are explained the hyper- and hypoformations as well as body deformities. The importance of the hormonal processes and of the internal glandular secretions is discussed. The third part deals with the relationship between constitutional types and numerous psychiatric ills. The author also discusses in this final part the relationship between constitutional types and the evolutionary process.—C. L. Golightly (Washington, D. C.).

161. Cuyas, C. Proceso formativo de la personalidad; origen de los rasgos físicos y morales. (The genesis of personality; the origin of physical and characterial traits.) Rev. Educ., La Plata, 1944, 85, No. 2, 46-51.—While conditioned by heredity, the basis of personality is not exclusively hereditary. Its genesis is described by five stages, in each of which certain aspects of growth become emphasized. The modern view of the genesis of personality need not be inconsistent with broad-type theories related to cultural trends. The point of view of integral education is supported by the present conception of personality and its development.—H. D. Spoerl (American International College).

162. Darley, J. G., & Anderson, G. V. Application of personality and character measurement. Rev. educ. Res., 1944, 14, 67-80.—Studies of personality traits distinguishing between various occupations, changes in personality due to education, new evidence for consistency of personality traits, and the effect of personality in determining attitudes are discussed. The methods include factor analysis and experimental setups. 82-item bibliography.—L. Adams (Barnard).

163. Dicks, G. H., & Childers, A. T. The social transformation of a boy who had lived his first fourteen years as a girl. II: Fourteen years later. Amer. J. Orthopsychiat., 1944, 14, 448-452.—In the 1934 Journal, the authors told the story of a boy reared as a girl for 14 years and described his life as a boy during the 4 years following his assumption of a boy's name and a boy's attire. Now his subsequent life is reviewed up to the age of 27 years in order to evaluate his adjustment. At present he is not particularly unstable, but his heterosexual adjustment seems somewhat uncertain. Although his masculinity structure is weak, he has found a temporary solution through membership in the State Guard.—R. E. Perl (New York City).

164. Eliasberg, W. Methods in graphology. J. Psychol., 1944, 18, 125-130.—Attacks on graphology are based in considerable degree on lack of information concerning experimental methods used in graphology. Methods may be experimental and yet not necessarily designed to yield quantitative results. The growth of experimental graphology is traced through Preyer's analysis of handwriting on the basis of variations in the type of stroke, the continuity, and the connections; Goldscheider's use of the pressure graph; Erlenmeyer's description of atactic and tremor writing; Meyer's analysis of manic-depressive handwriting as to the expression of typical emotions; and Rogues de Fursac's analysis

of the conscious and automatic components in the act of writing.—R. B. Ammons (Iowa).

- 165. Harrower-Erickson, M. R. Developments of the Rorschach test for large scale application. Rorschach Res. Exch., 1944, 8, 125-140.—This is the presidential address for the 5th annual meeting of the Rorschach Institute. The writer discusses three important developments in Rorschach procedure during the last 4 years, which have come about due to the pressing need for making a valuable clinical procedure available for mass application: (1) The Group Rorschach has seen extensive use in military personnel work, in public schools, in college and high school counseling, and in a study of vitamin B<sub>1</sub> deficiency. (2) The Multiple Choice Test, which is still in process of revision, has shown very promising results in a WAC induction center and in personnel selection, and has proven of considerable value when taken in conjunction with the interview and other psychological tests. (3) A parallel set of cards has been produced which, on a group of 200 psychotics, gave diagnostic results comparable with the original cards. Statistical evaluation of some 300-400 protocols from the new cards is now under way to provide parallel scoring standards. Although largescale methods are proving successful, intensive training and experience in the Rorschach method are essential in order to obtain reliable and valid interpretations of the results. Bibliography of 19 titles.

  E. M. L. Burchard (U. S. Naval Reserve).
- 166. Horn, D. A study of personality syndromes. Character & Pers., 1944, 12, 257-274.—Parameters of personality are variations as we go from one individual to another. The 11 parameters used were Murray's general traits, namely, anxiety, creativity, change/sameness, disjunctivity/conjunctivity, emotionality/placidity, endocathection/exocathection, impulsivity/deliberation, intensity/apathy, introception/extroception, projectivity/objectivity, and transcience/endurance. They were subjected to analysis, and the following syndromes emerged: (1) imaginative, creative introversion vs. practical, conventional extroversion; (2) creative expressiveness vs. apathetic conventionality; (3) unorganized expressiveness vs. organized perseverance (among college subjects), or apathetic withdrawal (among children); and (4) disorganized emotionality vs. organized control.—M. O. Wilson (Oklahoma).
- 167. Humm, D. G. The validity of the Humm-Wadsworth Temperament Scale. Psychol. Bull., 1944, 41, 590.—Abstract.
- 168. Humm, D. G., & Humm, K. A. Validity of the Humm-Wadsworth Temperament Scale: with consideration of the effects of subjects' response-bias. J. Psychol., 1944, 18, 55-64.—One hundred eighty-one subjects were rated by pairs of technicians on each of 7 components also measured by the Humm-Wadsworth Temperament Scale, according to whether the subject (1) definitely showed, (2) did not show, or (3) did not definitely show the characteristic behavior. These ratings are compared with profiles on a subsequently administered Temperament Scale. Of the total group, 21 showed too high a no-count (the number of no-responses used in answering the 318 question); 56, too low a no-count; and 104, an acceptable no-count. Tabulations

are given of the agreement between test scores and ratings for these groups. Using a method compensating for broad categories, correlations between the two measures were  $+.85\pm.005$  for the whole group and  $+.94\pm.003$  for the cases with acceptable no-counts.—R. B. Ammons (Iowa).

- 169. Levine, K. N., Grassi, J. R., & Gerson, M. J. Hypnotically induced mood changes in the verbal and graphic Rorschach: a case study. Part II: The response records. Rorschach Res. Exch., 1944, 8, 104-124.—In this article are reproduced 8 complete protocols for the subject from whom verbal and graphic Rorschach records were obtained under hypnotically induced emotional conditions described in Part I (see 18: 1121). This case study supports no particular theory of hypnosis or personality change but provides "interesting Rorschach material, provocative of thought with reference to general Rorschach theory."—E. M. L. Burchard (U. S. Naval Reserve).
- 170. Rosenberg, S. J., & Feldberg, T. M. Rorschach characteristics of a group of malingerers. Rorschach Res. Exch., 1944, 8, 141–158.—Analysis of Rorschach test results on 93 soldiers, either known to be malingerers or suspected of malingering on the psychiatric examination, reveals a distinct pattern of evasion, produced as a result of the subject's conscious fear that the test will be revealing. This evasive pattern of response consists of 11 Rorschach signs and 4 behavioral patterns. Six case records are presented to illustrate the various indicators of evasion. Although these signs are most frequently found in malingering psychopathic or psychoneurotic individuals who are consciously and grossly exaggrating their symptoms, they must be evaluated in relation to the entire clinical picture.—E. M. L. Burchard (U. S. Naval Reserve).
- 171. Rosenzweig, S. Converging approaches to personality: Murray, Allport, Lewin. Psychol. Rev., 1944, 51, 248-256.—This report attempts to furnish a perspective in which three standpoints may be viewed as essentially convergent and as affording the nucleus of a new discipline, 'personology.' The three standpoints are represented by Murray's psychoanalytic orientation (largely from Freud), Allport's personalistic note (from Stern in part), and Lewin's topology (as a Gestalt psychologist). The apparent division of the total field of personology among them is along certain lines of articulation which "make their reunion in a broader framework relatively easy." By means of charts and discussion, the author shows that the objectives, the methods of study, and the leading concepts of these contemporary theories of personality have a complementary pattern. It is suggested that there are signs that the implicit complementary pattern will become a fact.—M. A. Tinker (Minnesota).
- 172. Siegel, M. G. The Rorschach test as an aid in selecting clients for group therapy and evaluating progress. Ment. Hyg., N. Y., 1944, 28, 444-449.— Three illustrative cases are presented.—W. L. Wilkins (U. S. Naval Reserve).
- 173. Steinmetz, H. C. Unorthodox uses of personality tests. *Psychol. Bull.*, 1944, 41, 590.—Abstract.

174. Steinzor, B. Rorschach responses of achieving and nonachieving college students of high ability. Amer. J. Orthopsychiat., 1944, 14, 494-504.—Two matched groups of 15 students each were used as subjects to discover if there were any structural personality differences between achievers and nonachievers as measured by the Rorschach Test. On the whole the nonachievers gave indications, as measured by the Rorschach, of being a less well-adjusted group. Though there were individuals in the successful group who showed Rorschach signs of severe maladjustment, it is expected that the personally and socially better adjusted individual will do the more satisfactory school work.—R. E. Perl (New York City).

175. Symonds, P. M., & Krugman, M. Projective methods in the study of personality. Rev. educ Res., 1944, 14, 81-98.—Projective methods of the Rorschach, play techniques, the Thematic Apperception Test, finger painting, graphology, and drawing tests, with evidence on reliability and validity, are reviewed as found in the recent literature. Data are given on the group method in the Rorschach test. 135-item bibliography.—L. Adams (Barnard).

176. Traxler, A. E. Current construction and evaluation of personality and character tests. Rev. educ. Res., 1944, 14, 55-66.—New and revised tests of personality are presented with evidence on consistency. Topics discussed are: validation of the Bernreuter and other questionnaires, an examination of factor analysis as a method, free association, and interest and attitude inventories. 95-item bibliography.—L. Adams (Barnard).

177. Tschechtelin, S. M. A. A 22-trait personality rating scale. J. Psychol., 1944, 18, 3-8.—In order to obtain comparable forms of a personality rating scale for use with adults and children, the Kelly 36-Trait Personality Rating Scale for adults was modified for children by (1) eliminating the more abstract items and (2) rephrasing the questions with a vocabulary suitable for use with third- or fourth-grade children. Using a 10-value rating continuum, nearly 1,600 fourth-grade children rated each other and were rated by teachers on the resulting 22-item scale. Reliabilities of ratings on individual items ranged from .40 to .90. Mean scale values of ratings for items were all within ±.1 of the theoretical mean of 5.5.—R. B. Ammons (Iowa).

178. Tschechtelin, S. M. A. Factor analysis of children's personality rating scale. J. Psychol., 1944, 18, 197-200.—The average ratings of 300 children in grades IV-VIII by 8 of their associates on each trait of the Tschechtelin 22-Trait Personality Rating Scale were correlated with the ratings on the remaining 21 traits. Factor analysis revealed 4 factors necessary to account for the intercorrelations, but naming of the factors seemed currently impossible.—R. B. Ammons (Iowa).

179. Woodruff, A. D. An approach to the cultural personality type. J. educ. Sociol., 1944, 18, 45-50.— An individual's basic directional dispositions are made up of the values he seeks. By indicating their choices among functionally described situations concerning a place to live, a vocation, and a social group to join, 313 students in different parts of the United States furnished data on which a rank order

pattern of 12 values could be set up for each subject. The mean rank in all tests placed social service, home life, and friendship highest (or most cherished) and society, wealth, and excitement lowest. Sigma scores, used as a measure of the homogeneity of response, indicate friendship and personal improvement most consistently valued, while excitement, intellectual activity, and religion were most variable. The method holds promise of yielding a description of the American personality type and of the value-characteristics of subgroups.—H. A. Gibbard (Brown).

180. Zilboorg, G. Masculine and feminine; some biological and cultural aspects. Psychiatry, 1944, 7, 257-296.—A systematic survey is presented of traditional views of femininity, the psychoanalytical concepts and understandings of masculinity and femininity, biological and cultural considerations, and the development of present-day thought and understanding of feminine psychology, with emphasis upon the inadequacies and deficiencies of present concepts. 82-item footnote bibliography.—M. H. Erickson (Eloise Hospital).

[See also 130, 139, 145, 151, 182, 184, 186, 190, 220, 229, 230, 237, 276, 277.]

## GENERAL SOCIAL PROBLEMS (incl. Aesthetics)

181. Andriola, J. Social casework as a democratic process. Psychiatry, 1944, 7, 225-230.—Future trends in the development of social case work as a part of the democratic processes of government are: "the expansion of the social security program; the development of a low-cost medical-dental program for lower income brackets; the improvement in the quality and quantity of the work of privately supported social agencies to permit better integration with both local and national demands; an increased enrollment in schools of social work; the probable development of social work in South America, Europe, and Asia; and finally, the development and integration of research programs in human behavior supported both by public funds and private enterprise."—M. H. Erickson (Eloise Hospital).

182. Bacon, S. D. Inebriety, social integration, and marriage. Quart. J. Stud. Alcohol, 1944, 5, 86–125.—The typical arrested inebriate, from a study of all persons arrested in a 5-week period in 5 large and 3 small Connecticut towns, is markedly undersocialized, that is, he belongs to few social groups and acts in a limited sphere in those in which he does participate. Extreme residential mobility and more frequent unemployment are prevalent. Recreation tends to be solitary or with only casual acquaintances. One of the most noticeable characteristics is the inebriate's failure to marry; and, of the 421 married inebriates in the group studies, 141 were permanently separated.—W. L. Wilkins (U. S. Naval Reserve).

183. Baruch, D. W. Some aspects of discrimination in a war area. Psychol. Bull., 1944, 41, 589.—Abstract.

184. Beaglehole, E. Character structure; its rôle in the analysis of interpersonal relations. *Psychiatry*, 1944, 7, 145-162.—The application of the

viewpoint and insights of interpersonal theory to the analysis of human interaction requires a framework or structure within which the many and changing interpersonal relations can be given a classificatory Such a classification must be based upon something more than concepts of primary or original human needs. Every culture orders interpersonal relations on the basis of a set of universals: (1) those types of interaction that must be followed for the individual to remain a member of the group and (2) those sets of variant interactions that may be fol-lowed according to defined conditions. The development of this theme follows, under the topical headings of culture, class and caste, institutional groups. analysis of character structure, the study of character structure, and the validity of character structure. The author concludes that character structure apparently possesses many of the characteristics for a nuclear concept of interpersonal integration and hence offers an opportunity for the organization of many significant observations on the nature of interpersonal relations .- M. H. Erickson (Eloise Hospital).

185. Boisen, A. T. Conscientious objectors; their morale in church-operated service units. Psychiatry, 1944, 7, 215-224.—The author reports in detail his findings from a 3 weeks' study of a conscientious objectors' camp and from his 5 weeks' study of special service units of conscientious objectors working in institutions for the mentally ill or defective. He classifies conscientious objectors into those who do their own thinking, those who follow the teachings of others, those who are primarily morbidly hostile to authority, and the mixed types. Type distributions, religious backgrounds, duration of stay in camps, type of adjustment, and frequency and character of physical disabilities are discussed. Nine recommendations are offered for the betterment of civilian public service camps.—M. H. Erickson (Eloise Hospital).

186. Burgess, E. W., & Wallin, P. Personal appearance and neuroticism as related to age at marriage. Hum. Biol., 1944, 16, 15-22.-Analysis of data obtained from 483 couples revealed a positive correlation between physical attractiveness of women and their age at marriage. For women, differences in age at marriage as related to ratings of physical attractiveness are greatest by ratings of fiance, intermediate by self-ratings, and least by friends' ratings. There is no association between age at marriage and personal appearance of men as judged by self-ratings; but there is an association between the age at marriage of men and their physical at-tractiveness as measured by ratings of fiancées and friends. Ratings of fiancées were more discriminative than those of friends. For neither sex was there any relationship between age at marriage and neuroticism as measured by the total score on the Thurstone inventory.—F. A. Beach (American Museum of Natural History).

187. Burrows, A. S., Carroll, C., Moore, S., & Quinn, D. Radio comedy in wartime. In Various, Writers Congress, Proceedings. Berkeley, Calif.: University of California Press, 1944. Pp. 224-230.— "The fact that humor is a tremendous social weapon is nowhere better proved than in the field of radio."

Certain radio comedy shows are analyzed with particular reference to their treatment of wartime problems, such as rationing and the black market. The perpetuation of racial stereotypes through the medium of radio is indicated. The authors believe that in the last few years there has been a decrease in this type of humor, and they analyze the radio shows in which there is an attempt to see that Negro and Jewish characters are treated with truth and respect. "The comedy writer is faced with the responsibility of using carefully the powerful weapon which he possesses. The violator of wartime which he possesses. The violator of wartime rules, the O.P.A. cheat, the nonpayer of income tax must be the villain of his jokes, not the hero. Enemies must be mocked in such a fashion that they still appear formidable foes, and not push-overs."—F. Fearing (California).

188. Child, I. L. Readjustment of the returning serviceman. Psychol. Bull., 1944, 41, 583-584.—Abstract.

189. Crespi, L. P. Attitudes toward conscientious objectors and some of their psychological correlates. J. Psychol., 1944, 18, 81-117.—In March, 1943, 163 Princeton students answered 3 questionnaires dealing with (1) general liberalism and conservatism, (2) wartime and estimated postwar attitudes toward CO's as a class, and public attitudes toward CO's, and (3) scales of attitude toward various types of CO's. This student group was on the average neutral in its attitude toward CO's generically, was willing to accept CO's socially, approved religious objectors more than intellectual, believed CO's are sincere in their conviction, and in general manifested a tolerant attitude. Excluding religious liberalismconservatism, liberals showed greater approval of CO's than did conservatives and tended to favor a more radical type of CO, while the deistically inclined were partial toward religious absolutists. It is concluded that attitudes towards CO's are as diverse as the individuals who hold them and are related significantly to their frames of reference.-R. B. Ammons (Iowa).

190. Drake, R. M. A study of leadership. Character & Pers., 1944, 12, 285-289.—There tends to be a high degree of trait consistency in leadership, which argues for the reality of the trait concept. With the exception of self-confidence, sociability, and desire to impose will, in which girls excel boys, all traits are approximately equal for boys and girls. Most important traits positively related to leadership are: originality, aggressiveness, common sense, cheerfulness, humor, emotional stability, trustworthiness, tact, persistence, and desire to excel. Traits negatively related are readiness for anger, conceit, introversion, selfishness, pure-mindedness, quick oscillation, occasional extreme depression, and excitability.—M. O. Wilson (Oklahoma).

191. Eissler, K. R. Balinese character; a critical comment. Psychiatry, 1944, 7, 139-144.—Theoretical discussion is offered of various points in the Balinese character as described by Bateson and Mead (see 17: 1632). Topics covered are the Balinese concept of the future, the contrast between the Occidental integration of the whole of the body into a unit and the Balinese experience of the complete and separate unitary character of a part of the body,

child-parent relationships, and the Balinese kinesthetic patterns.—M. H. Erickson (Eloise Hospital).

192. Farnsworth, P. R. Prestige in music. Psychol. Bull., 1944, 41, 587.—Abstract.

193. Fearing, F. The interpretive process. In Various, Writers Congress, Proceedings. Berkeley, Calif.: University of California Press, 1944. Pp. 508-524.—The paper discusses, under the following headings, the insights into the dynamics of collective and individual behavior which the writer for the screen and radio should possess: form and content, the psychological bases of the need for meaning, myths and stereotypes, contemporary tensions, and the consequences of failure. In a rapidly changing world, the individual seeks patterns of order and coherence (and hence, security) which will enable him to understand what is happening to him and around him. This is the need for meaning, without which mass tensions may develop. The individual uses all the symbolic devices available to him as interpretive schemes. It is the social function of the creative writer, particularly in the mass media, to assist the individual to satisfy this need for meaning. The interpretations which a writer may offer are only tentative, but they afford the individual an opportunity to explore problems, examine underlying causal factors, experience alternative solutions vicariously, and see situations through the eyes of others. Myths and stereotypes may serve these purposes, but they are likely to oversimplify complex problems. The need for meaning is especially important in contemporary society. The standard interpretive formulae are inadequate, and serious mass tensions have developed. These are discussed, and the consequences of the failure to alleviate them are indicated .- F. Fearing (California).

194. Foster, R. G. Marriage and family relationships. New York: Macmillan, 1944. Pp. xv + 314. \$2.50.—This book, intended primarily as a collegeage text, is divided into four parts: personal development in relation to marriage; the immediate prelude to marriage; evolving a satisfactory family life; and the family and democratic society. Wartime marriage and resulting problems are considered. The appendix includes lists of supplementary references, questions and exercises for each of the chapters, and discussion questions about marriage and family life as asked by a class of 27 college freshmen.—C. R. Adams (The Pennsylvania State College).

195. Frank, L. K. The historian as therapist. Psychiatry, 1944, 7, 231-236.—Man lives in a cultural world which he has created by imposing on nature the basic ideas, beliefs, assumptions, and aspirations which make the world meaningful to him. Hence, he does not live at the level of physiological functioning and organic impulse. Therefore his personal development and organization reflect both his past history and that of the culture in which he lives, and psychotherapy for the disorganization of his personality is necessarily accomplished by reordering it in terms of the historical past of his culture.—M. H. Erickson (Eloise Hospital).

196. Lall, S. Distribution of intelligence in U. P., India. Brit. J. educ. Psychol., 1944, 14, 95-98.—
A verbal group intelligence test, constructed in Hindustani after the pattern of the Moray House

tests, was given to all children of age 11+ in classes VI and above in the Government high schools of the Indian Provinces of Agra and Oudh. In all, 1,419 children were tested, of whom 34 were girls. When the distribution of intelligence according to sex, religion, caste, geographical region, and profession of parents was computed statistically, significant group differences at the 1% level appeared only between Brahmins and Sudras among the castes. Children whose parents were classified as business men were significantly lower in mean IQ as compared with the offspring of lawyers, physicians, government employees, and teachers. Boys did not differ from girls, nor Hindus from Mohammedans.—

R. C. Strassburger (St. Joseph's College for Women).

197. Lazarsfeld, P. F., & Merton, R. K. The psychological analysis of propaganda. In Various, Writers Congress, Proceedings. Berkeley, Calif.: University of California Press, 1944. Pp. 362-380.— Content analysis of radio programs and motion pictures requires the use of certain devices based on clinical experience and founded on psychological or sociological theory. These "vary from the one extreme of counting the frequency of certain key symbols to the other extreme of determining the structure of the propaganda-as-a-whole." Such structure of the propaganda-as-a-whole." Such devices are symbol counts, one dimensional classification of symbols, item analysis, thematic analysis, structural analysis, and campaign analysis. purpose of these analyses is to provide clues to probable responses to the propaganda. Response analysis makes use of the focused interview. Particular interview tactics are described which are designed to overcome the consultant attitudes of certain respondents and the inarticulateness of others. In certain instances people do not respond to propaganda in the manner expected. This results in boomerang effects, various types of which are described. The distrust of propaganda may be overcome by technological propaganda, or the propaganda of facts. This makes use of concrete incidents with circumstantial details which help to orient the individual. It preserves the individual's sense of autonomy, in that it does not tell him what to do but shows him a path he may take. Propaganda cannot prevail if it runs counter to events or forces, and it is not a substitute for social policy or social action.—F. Fearing (California).

198. Lestchinski, A. Le réel et le social; aperçu d'une des formes de l'adaptation psychologique. (The real and the social; outline of a form of psychological adaptation.) Praxis, 1943, 32, 499-505.

199. Malinowksi, B. A scientific theory of culture, and other essays. Chapel Hill, N. C.: University of North Carolina Press, 1944. Pp. v + 228. \$3.00.—This posthumous collection of essays presents Malinowski's belief in the theory that culture is an adjustment to basic human needs and desires.—(Courtesy Publishers' Weekly).

200. Maxham, H. K. A study of the viewpoints of women of different age groups. J. genet. Psychol., 1944, 64, 311-315.—Women over a wide age-range were mailed questionnaires, which called for their rating of 10 statements concerning domestic relations on a 9-point favor-disfavor scale and for their rating of 38 traits on a 9-point scale of "desirability in a husband." An analysis of the responses of 5 age

groups making up a total of 530 returned questionnaires showed, in general, a decreasing variability of opinion with age in the case of questions dealing with women's status. It is concluded "that the social environment of the moment was of greater weight in determining answers than was any difference in age, the variations between age-groups being usually one of relatively small degree."—R. B. Ammons (Iowa).

201. Moreton, F. E. Attitudes to religion among adolescents and adults. Brit. J. educ. Psychol., 1944, 14, 69-79.—Responses of 414 subjects of above average intelligence, aged 17-77, reveal the group as a whole moderately favorable to religion, although the great majority attend church seldom or never. Cessation of attendance at religious services occurred most frequently between 15 and 19. Replies to a similar scale from a group of 354 adolescents, aged 11-18, show an attitude to religion somewhat less favorable than that of the adults.—R. C. Strassburger (St. Joseph's College for Women).

202. Murphy, G. Psychology and the peace. Psychol. Bull., 1944, 41, 582-583.—Abstract.

203. Rashevsky, N. Contributions to the mathematical theory of human relations. VIII: Size distribution of cities. Psychometrika, 1944, 9, 201-215.

—An attempt is made to connect the distribution function of the sizes of the cities with the distribution functions of some other characteristics of the individuals in the society. Several theoretical possibilities are discussed and different relations are derived. A possible connection with some observed relations is discussed.—(Courtesy Psychometrika).

204. Roback, A. A. A dictionary of international slurs. Cambridge, Mass.: Sci-Art Publishers, 1944. Pp. 394. \$6.25.—The dictionary consists of (a) a collection of approximately 1000 slurs in English on other nationalities; (b) a dictionary of slurs in a number of foreign languages (over 1000 expressions) translated literally and idiomatically, together with the original words or phrases; and (c) an inventory of over 1000 proverbs which relate to some 50 national groups and are provided with historical cues. Numerous national comparisons indicate the status of various groups centuries ago. A short treatise on ethnic prejudice gives the backgrounds of the various nationalities, together with the accepted group traits for each. A bibliography of linguistic, folkloristic, and general works is included.—M. Lazrus (Pleasant-ville Cottage School).

205. Robinson, E. War songs of America. In Various, Writers Congress, Proceedings. Berkeley, Calif.: University of California Press, 1944. Pp. 284-304.—The songs of soldiers in all the American wars are reviewed and analyzed. "Soldier songs in all wars have had a few common subjects: bad food, the prevalence of 'cooties,' graybacks, lice, and bedbugs. There are serious or satirical songs about the terrors of war, ribald songs about sweethearts, songs about loved ones, and 'I Want to Go Home,' and, finally, songs about the enemy. Each war had its characteristic songs, and the differences in the war songs of different periods are significant." Suggestions for present-day song material are given, and the importance of native American folk music is indicated.—F. Fearing (California).

206. [Various.] Writers' Congress. Proceedings of the conference held in October, 1943, under the sponsorship of the Hollywood Writers' Mobilization and the University of California. Berkeley, Calif.: University of California Press, 1944. Pp. xx + 663. \$5.00.—The theme of the congress was the role and techniques of the professional writers for the mass media of communication in the war effort and in the postwar world. The papers, presented by psychologists, anthropologists, sociologists, and professional writers for the radio motion picture and press, fall into two general categories: those concerned with the general sociological and psychological implications of the mass media and those concerned with technical and craft problems. In the first category are papers on propaganda analysis, the nature of the enemy, writers in exile, minority groups, problems of the peace, tensional areas in the American scene, and Pan-American affairs. In the second group are papers on the feature film, documentary film, animated cartoon, creative radio, radio news, television, humor and the war, song writing, labor press, music and the war, and publicity and the war. (See 19: 187, 193, 197, 205, 238.)—F. Fearing (California).

207. Willmann, R. R. An experimental investigation of the creative process in music. The transposability of visual design stimuli to musical themes. Psychol. Monogr., 1944, 57, No. 1. Pp. 76.—The author endeavored to find what effects the presentation of four visual designs would have on musical composition. Design A was a square; B, an object with a circle arc as a base and 3 sine curves as a top; C, a thin saw-toothed form; and D, a lightning-like narrow form. These designs were presented to selected "standard" composers, "popular" composers, and college students. The musical themes which resulted were analyzed and checked for distinguishing characteristics. Verbal reports were also collected. Each design stimulated themes with rather consistent characteristics, being least consistent with the college students. Auditors chosen to attempt matches of themes and designs succeeded far more than chance would allow. It was concluded that 'there is a carry-over from an abstract design to the resultant musical theme when the theme is composed to the design." The monograph includes an historical introduction and a bibliography of 40 references. The themes offered by the composers are given in an appendix .- P. R. Farnsworth (Stanford).

[See also abstracts 5, 17, 39, 54, 61, 68, 73, 79, 112, 124, 126, 179, 196, 211, 217, 219, 228, 276, 278, 280, 283, 286, 291, 292, 293.]

#### CRIME AND DELINQUENCY

208. Curran, F. J. Psychiatric aspects of juvenile delinquency. N. Y. St. J. Med., 1944, 44, 290-291.

—Curran discusses briefly the causes and prevention of juvenile delinquency and gives some statistics from New York City. During 1942 there was only a slight increase, but during the first months of 1943 there was an increase of 43%, largely among young girls. The number of boys, aged 16-19, admitted to the Adolescent Court decreased in 1942, possibly because many youths, aged 17-19, joined the Navy

or Coast Guard. However, the number in the 16-17 year bracket increased and their offenses tended to be more serious, e.g., grand larceny rather than petty stealing. This country could learn much from England in the systematic constructive utilization of the energies and drives of children and adolescents for the war effort.—M. E. Morse (Baltimore, Md.).

209. García Cerda, O. La delincuencia juvenil en los Estados Unidos de Norte América. (Juvenile delinquency in the U. S. A.) Criminalia, Méx., 1944, 10, 650-695.—Detailed summaries are presented of the organization, authorization, and functioning of the juvenile courts of Indianapolis and of Philadelphia. Reclamation programs of these courts and affiliated social agencies are discussed. There are two organization charts, two statistical trend charts, and several statistical tables showing classifications of juvenile delinquency in the two cities.—H. D. Spoerl (American International College).

210. Germain, W. M. Changing human nature. Police J., N. Y., 1943, 29, No. 3, 5-6; 14-16.—Conduct is the end result of the interaction of the thalamic and cortical apparatus in response to either or both external and internal stimuli. Crime is only one symptom of personality maladjustment. The author describes the operation of his corrective therapy course, based on these principles, which helps "discouraged youngsters acquire a new conscious control of self" by acquiring new habits of response.—G. S. Speer (Central YMCA College).

211. Kvaraceus, W. C. Juvenile delinquency and social class. J. educ. Sociol., 1944, 18, 51-54.— The occupational distribution of parents of 761 delinquents in Passaic was compared with the distribution of all male and female workers in the community in 1940. In the delinquent sample, significantly fewer parents were in the professions, working as proprietors, clerks, sales personnel, craftsmen, or in nondomestic service. Significantly larger proportions were factory operatives, W.P.A., other laborers, and domestic servants. It is probable that delinquency has its roots in the frustrations that occur in the lower and middle classes.—H. A. Gibbard (Brown).

212. Van Vorst, R. B. An evaluation of the institutional adjustment of the psychopathic offender. Amer. J. Orthopsychiat., 1944, 14, 491-493.—Delinquent psychopaths were compared with matched delinquent nonpsychopaths in an attempt to determine if there is a consistency of overt behavior of cases, clinically so classified, which would distinguish them from ordinary delinquents as far as institutional adjustment is concerned. The psychopath remains longer in the institution (where release is earned in terms of credits for conduct and effort), and he is involved in more offenses, particularly very serious ones, than is the ordinary delinquent. These findings may be considered an indirect validation of the current clinical use of the term psychopathic personality as applied to delinquent boys.—R. E. Perl (New York City).

213. Van Vorst, R. B. The psychopathic delinquent: an interpretation of some current opinions and indications for treatment and segregation. *Psychol. Bull.*, 1944, 41, 587.—Abstract.

214. Williams, J. H. The socially maladjusted. Rev. educ. Res., 1944, 14, 231-240.—The mental factors, physical aspects, attitudes, and personality traits of the socially maladjusted are studied by methods of statistical analyses, interest inventories, medical histories, Rorschach, the Stanford-Binet, personality questionnaires, art experience, and analyses of delinquency areas. Renewed evidence is given for the relation of lowered delinquency rates with increased recreational facilities, individualized school policies, and clinical treatment. 81-item bibliography.—L. Adams (Barnard).

#### [See also abstract 231.]

## INDUSTRIAL AND PERSONNEL PROBLEMS

215. Baker, H. Employee counseling, a survey of a new development in personnel relations. Industr. Relat. Sect. Res. Rep. Ser., 1944, No. 69. Pp. 64.— Information obtained from 61 companies or governmental agencies with counseling services has been analyzed to show some of the practices and the problems of this largely wartime development. The aims of counseling, the duties of counselors, and the relationship of a counseling program to top management, to the personnel organization, to foremen, to the union, and to individual employees are discussed. Experiences concerning the qualifications, training, number, sex, staff organization, and work place of the counselors are described, as is the prewar development of counseling programs. The report summarizes the main types of programs, factors in their development, and opinions concerning the future of this development .- H. F. Rothe (Stevenson, Jordan & Harrison, Inc.).

216. Bingham, W. V. Personnel classification testing in the Army. Science, 1944, 100, 275–280.— The author describes the work of the Committee on Classification of Military Personnel and affiliated groups concerned with classification problems for the Army. The need, history, experimental work, and results of tests for general intelligence, mechanical aptitude, personality, night vision, combat leadership, etc. are briefly described.—F. A. Mote (Connecticut).

217. Brown, M. Morale in industry as seen by a neuropsychiatrist. Chicago: Zurich Insurance Companies, 1944. Pp. 31.-"Morale in industry, as used here, is that group of mental attitudes toward their work, their place of employment, their em-ployees and their fellow workers which enable workers to be happiest and most productive." measured in terms of labor turnover, absence, production, and spoilage rates, and in terms of pleasantness of relationships, attitudes toward management, concern with improving production, etc. It is influenced by three groups of factors; (1) those within the employee, such as health and personality; (2) conditions met at work, such as physical arrange-ments and policies; and (3) conditions met away from work, such as state of public, business, and economic affairs. Suggestions are presented concerning ways of influencing morale through manipulation of these factors.—H. F. Rothe (Stevenson, Jordan & Harrison, Inc.).

218. Case, H. W. Counseling technical employees. Psychol. Bull., 1944, 41, 590-591.—Abstract.

219. Cohen, R. R. Officers and their relation to a mental-hygiene program for trainees. Ment. Hyg., N. Y., 1944, 28, 368-380.—Explanatory talks to officers and noncommissioned officers at Aberdeen Proving Ground, Maryland, include the following topics: normal civilian resentments, regimentation, fear, and military mental hygiene. Principles of leadership and discipline as applied to typical American trainees are reviewed.—W. L. Wilkins (U. S. Naval Reserve).

220. Dorcus, R. M. A brief study of the Humm-Wadsworth Temperament Scale and the Guilford-Martin Personality Inventory in an industrial situation. *Psychol. Bull.*, 1944, 41, 590.—Abstract.

221. Dunford, R. E., & Hultquist, K. B. Personnel testing in the TVA. Publ. Person. Rev., 1944, 5, 133-139.—War emergency conditions required expanded personnel recruitment and testing programs. The objectives, historical trends, scope, and present status of the testing program, together with the research program and prospects for the future, are described in this article.—H. F. Rothe (Stevenson, Jordan & Harrison, Inc.).

222. Fear, R. A., & Jordan, B. Employee evalua-tion manual for interviewers. New York: Psycho-logical Corporation, 1943. Pp. 39. \$1.75.—The authors describe the Employee Evaluation Form they have devised to help make the interview an effective measurement tool. "The Employee Evaluation Form is based on the assumption that the best indication of what an individual will do in the future is what he has done in the past. Past performance is not to be considered in terms of a single factor, such as work experience, but rather from the standpoint of the person as a whole. The interviewer, therefore, is called upon to rate each applicant on seven different factors, namely, previous experience, training, manner and appearance, sociability, maturity, and leadership capacity. follows this with an over-all summary of the interview which indicates clearly the extent to which the applicant's experience and total composite of traits and abilities qualify him for the job in question. While the manual contains many suggestions for obtaining significant information relative to the various areas of the individual's background, the interpretation of responses has only been outlined. Responsibility for successful application of these methods rests upon the training, experience and skill of the interviewer." Three sample evaluation forms, filled out for illustrative purposes, are included .-H. F. Rothe (Stevenson, Jordan & Harrison, Inc.).

223. Gallas, N. M. Cooperative performance tests for clerical classes. Publ. Person. Rev., 1944, 5, 156-163.—The origin, organization, policies, and procedures of the co-operative testing service for three Los Angeles County agencies are described. Some details of financial arrangements, test materials, certificates of proficiency, procedures for referring applicants for testing, and the scope of the services are also presented.—H. F. Rothe (Stevenson, Jordan & Harrison, Inc.).

224. Guilford, J. P. Psychological services in the Army Air Forces. Psychol. Bull., 1944, 41, 591.—Abstract.

225. Herbolsheimer, A. J. The role of the extraocular musculature in the aviation physical examination. J. Aviat. Med., 1944, 15, 258-263.—Tests of
extra-ocular muscle function are subject to three
sources of error: (1) faulty equipment, (2) confusion
or lack of understanding on the part of the examinee,
and (3) willful deception on the part of the examinee.
The red glass and Maddox rod tests are discussed
with reference to these sources of error. To discover well-coached cases of deception, the author
devised a light cabinet operated by remote control
which permits the examiner to show two red and two
white lights in any combination and in unfamiliar
orientations.—A. Chapanis (U. S. Army Air Forces).

226. Humphreys, L. G. Factor analysis findings in the AAF Psychological Program. Psychol. Bull.,

1944, 41, 592.—Abstract.

227. McConnell, W. C., & McConnell, W. H. Neuropsychiatric aspects of the civilian pilot examination. J. Apiat. Med., 1944, 15, 231-237.— The authors stress the importance of the neuropsychiatric examination of the pilot. For the neurological examination, certain general principles are suggested to test the integrity of neural tracts. The psychiatric appraisal of the applicant should attempt to classify him as normal, feeble-minded, psychoneurotic, or psychotic. "The victim of any mental disease should not fly." Certain general aspects of mental abnormality are discussed, to assist the examiner in identifying these conditions during the interview.—A. Chapanis (U. S. Army Air Forces).

228. Newer, B. S. Employment prospects. Person. J., 1944, 23, 135-144.—A rating scale, devised to measure an individual's employability, has been found useful in predicting the employment of individuals and groups. The characteristics found relevant to employment changes were age, experience, length of unemployment, nationality, dependency, race, religion, citizenship, physical defects, wages, education, prison record, reason for leaving last job, sex, personality, and home conditions. Race, religion, and nationality were later omitted because the scale was criticized as being discriminatory; however this change did not injure the predictive value of the scale. Orientals, Negroes, and Indians are accepted by employers less frequently than whites.—M. B. Mitchell (U. S. Naval Reserve).

229. Piotrowski, Z., Candee, B., Balinsky, B., Holtzberg, S., & Von Arnold, B. Rorschach signs in the selection of outstanding young male mechanical workers. J. Psychol., 1944, 18, 131-150.—On the basis of work record, ratings by foremen, and ratings by trained vocational counselors, 45 clear-cut cases of outstanding workers and 33 of mediocre workers were chosen. Analysis of their responses to a slightly modified form of the Group Rorschach as administered by Harrower-Erickson showed them clearly differentiated by four signs: movement of natural forces or inanimate objects (m), competent handling of Plates IV and VI (Frsx), progressive elaboration of inkblot interpretations (hEvd), and no whole, form interpretation of Plates VIII, IX, and X (noWF). "In conclusion (a) if m counts two

points and Frsx, hEvd, and noWF as one point each, (b) if young males with three or more points are classified as likely to become outstanding mechanical workers, (c) if young males with two or less points are classified as unlikely to become outstanding mechanical workers, then the four Rorschach signs, developed and defined in this investigation, can discriminate between outstanding and non-outstanding mechanical workers to a rather high degree."—R. B. Ammons (Iowa).

230. Ross, W. D. The uses of the Rorschach method in the Canadian Army. Rorschach Res. Exch., 1944, 8, 159-161.—In the Canadian Army the Rorschach method has been used extensively as an adjunct to other psychiatric methods and to shed additional light on information obtained by psychiatric interview. The individual technique has been preferred except in a trial of group procedure for screening paratroopers, where a modified self-recording procedure was employed.—E. M. L. Burchard (U. S. Naval Reserve).

231. Schneider, A. J. N., LaGrone, C. W., Jr., Glueck, E. T., & Glueck, S. Prediction of behavior of civilian delinquents in the armed forces. Ment. Hyg., N. Y., 1944, 28, 456-475.—The 5 Glueck predictive factors were tested on 200 offenders at a rehabilitation center. Prediction scores showed that 85% of the men should probably not have been inducted, so poor was their chance to adjust to army life. Agreement between the psychiatrist's and the psychologist's estimate of later adjustment and the prediction score was high.—W. L. Wilkins (U. S. Naval Reserve).

232. Sells, S. B. Measurement and prediction of special abilities. Rev. educ. Res., 1944, 14, 38-54.

Factors of use in predicting success in the professions of dentistry, medicine, law, engineering, nursing, teaching, and business administration are given, with data on reliability and validity of the measures. More specific aptitude tests in the field of clerical work, art, and music are listed, as well as tests of visual and auditory acuity, color blindness, mechanical and gross motor abilities, and driving and flying aptitudes. Data on the use of these last tests in predicting and discriminating success in industry or the office are given in full, with criteria for studying their validation. 132-item bibliography.

L. Adams (Barnard).

233. Shuttleworth, F. K. A critical evaluation of two aspects of the Army Specialized Training Program in Basic Engineering. J. Psychol., 1944, 18, 159-182.—"This paper presents a critical evaluation of the Army Specialized Training Program in Basic Engineering with special reference to (a) standards for the selection of Term I ASTP candidates and (b) the block system which required mastery of all the work of each term before any of the work of succeeding terms could be undertaken. The selective standards imposed by ASTP lacked validity in respect to the test employed [AGCT] and were too low in respect to previous training prescribed. . . . Approximately half of the money, time, and educational effort devoted to Term I of Basic Engineering was wasted; a fourth was wasted on poorly qualified trainees who should never have been assigned to the program, a fourth was wasted by requiring over-

qualified trainees to spend three terms in studies which could have been completed in two terms. Similarly, with individualized programs 40 percent of the men originally assigned to Term II could have completed two terms in one."—R. B. Ammons (Iowa).

234. Southworth, F. C., Jr. Neuropsychiatric screening at a Naval training station. J. Omaha clin. Soc., 1944, 5, 9-13.—The operation of the screening program at Great Lakes Naval Training Station is described. Percentage data on rejections for various reasons are given together with the chief factors that influence rejection.—S. R. Hathaway (Minnesota).

235. Stelter, E. J. Aviation medicine and research. J. Omaha clin. Soc., 1944, 5, 1-4.—A brief summary is given of some of the fields of research of the flight surgeon, with general findings. Some observations by the writer regarding pilots aboard carriers in a combat zone are appended.—S. R. Hathaway (Minnesota).

236. Sweetland, C. The adjustment of handicapped persons to employment in wartime. Smith Coll. Stud. soc. Work, 1944, 15, 66-82.—Records of 73 persons who received vocational training at the Handicapped Placement Bureau between July, 1941, and July, 1942, and who were employed one year later, were reviewed. A sample group was interviewed again in June, 1943. Three fourths of the group made good adjustments throughout training and employment. Adjustment of the others tended to improve with work experience.—M. R. Jones (U. S. Naval Reserve).

237. Tecoz, H. F. Caracterologie et aptitudes professionnelles. (Characterology and professional aptitudes.) *Praxis*, 1943, 32, 434.

238. Thomas, F. The cartoon and training films. In Various, Writers Congress, Proceedings. Berkeley, Calif.: University of California Press, 1944. Pp. 133-138.—The use of animated cartoons in training and indoctrination motion pictures in the Army is discussed. Adequate animated cartoons as training films must possess certain elements: humor, clarity of diagrams, a cartoon character, caricature and satire, and fantasy.—F. Fearing (California).

239. Warren, N. D. The functions of a psychological research unit in the Army Air Forces. Psychol. Bull., 1944, 41, 591.—Abstract.

[See also abstracts 68, 74, 88, 103, 120, 127, 135, 140, 143, 158, 162, 254, 257, 265.]

#### EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

240. Baten, W. D., & Hatcher, H. M. Distinguishing method differences by use of discriminant functions. J. exp. Educ., 1944, 12, 184-186.—The authors describe the statistical procedures employed in using discriminant functions to compare the complex results of two methods of instruction in a home economics course. Scores on a final test, the food score card, and a check list of observed abilities were the bases of evaluation. When an experimental group, in which the students and teacher together determined goals, planned methods, and checked

accomplishments, was compared to a control group directed by the teacher alone, the former was found superior. The discriminant function can be used effectively to compare compounds made up of several sets of observations.—E. B. Mallory (Wellesley).

241. Blackwell, A. M. A list of researches in educational psychology and teaching method. Part III. Brit. J. educ. Psychol., 1944, 14, 99-105.—These are titles of researches offered for higher degrees of British universities from 1918 to the present. (See also 18: 1214, 2559.)—R. C. Strassburger (St. Joseph's College for Women).

242. Brown, F. An experiment in "preventive testing" in the kindergarten. Ment. Hyg. N. Y., 1944, 28, 450-455.—Kindergarten teachers in Minneapolis are trained in administering the Stanford-Binet, so that the teacher herself will know the successes and failures of the child. Mental age becomes not a mere score but is seen in the context of the child's responses, and the whole testing situation is made to serve mental hygiene ends.—W. L. Wilkins (U. S. Naval Reserve).

243. Burton, W. H. The guidance of learning activities; a summary of the principles of teaching as based upon the principles of learning. New York: Appleton-Century, 1944. Pp. xiv + 601. \$3.75.— Part I deals with the principles of learning. In it are considered characteristics of educative experience and of teaching, the nature of the learner, and organization of teaching-learning situations in addition to the relation of experience to learning. Part II is concerned with the organization of functional units and of subject-matter units. Types of units as well as planning and developing units are discussed. In Part III, the organization of assign-study-recite procedures is given. Assignments, independence in study, recitation, and the use of questions and daily lesson plans are covered. The final section deals with improvements of techniques common to both organizations. Justification for including both procedures, the traditional assign-study-recite-test procedure and the more recently developed unitary organization, are given by the author: (1) each procedure has a place and function; (2) functional or experience units are best suited for beginners, and the assign-study-recite-test procedure is legitimate for more mature children; and (3) teachers tied to traditional methods should know the best procedures available. References to basic research material are extensive. - M. A. Tinker (Minnesota).

244. Cornell, E. L. The development and application of age progress percentile norms of elementary school achievement. J. exp. Educ., 1944, 12, 201-225.—An individual's school status and progress can be more meaningfully indicated by reference to the range of achievement of his age group than by reference to grade norms. A study of some 1,500 pupil records located 600 usable cases and 460 who had taken the Stanford Achievement tests for three successive years. Distributions were made of their scores at each chronological age, and the positions of percentile points P90, P75, P50, P25, and P10 in successive tests were located. It was found that the progress of the average pupil, in educational age, followed a straight line, while those above average showed acceleration and those below

average showed deceleration. In a second part of the study, the percentile levels were used to evaluate grade placement, school marks, and teacher-effectiveness. The author emphasizes the significance of the findings for problems of grading, promotion, ability grouping, and school marking.—E. B. Mallory (Wellesley).

245. Cox, G. B., & Anderson, H. H. A study of teachers' responses to problem situations in school as reported by teachers and students. Amer. J. Orthopsychiat., 1944, 14, 528-544.—Using items from a mental-hygiene scale for teachers, the authors determined the reliability with which teachers and students mark their respective ballots and analyzed the reports of teachers and students in a large high school. In investigating techniques which teachers use in responding to problem situations, this study shows, both by the teachers' reports for themselves and by the students' reports of the teachers' techniques, that in dealing with problems the teachers in general either defeat their own purposes by making the problem worse or they use techniques unrelated to the problem.—R. E. Perl (New York City).

246. Davis, F. B. Fundamental factors of comprehension in reading. Psychometrika, 1944, 9, 185-197.—A survey of the literature was made to determine the skills involved in reading comprehension that are deemed most important by authorities. Multiple-choice test items were constructed to measure each of 9 skills thus identified as basic. The intercorrelations of the 9 skill scores were factored, each skill being weighted in the initial matrix roughly in proportion to its importance in reading comprehension, as judged by authorities. principle components were rather readily interpretable in terms of the initial variables. Individual scores in components I and II are sufficiently reliable to warrant their use for practical purposes, and useful measures of other components could be provided by constructing the required number of additional items. The results also indicate need for workbooks to aid in improving students' use of basic reading skills. The study provides more detailed information regarding the skills measured by the Cooperative Reading Comprehension Tests than has heretofore been provided regarding the skills actually measured by any other widely used reading test. Statistical techniques for estimating the reliability coefficients of individual scores in principal-axes components, for determining whether component variances are greater than would be yielded by chance, and for calculating the significance of the differences between successive component variances are illustrated. 42-item bibliography.—(Courtesy Psychometrika).

247. Dexter, R. W. A questionnaire for the criticism and evaluation of a college course. Sch. Sci. Math., 1944, 44, 640-645.—A third revision of a questionnaire for the students' evaluation of a course of study is presented. The questionnaire, which has been in use for 10 years, covers text, lectures, laboratory, field trips, quizzes, examinations, class discussions, requirements, and general evaluation. It is intended to be used as an objective, anonymous evaluation of a course of study.—G. S. Speer (Central YMCA College).

248. Forrester, G. Methods of vocational guidance; with specific helps for the teacher of business subjects. Boston: Heath, 1944. Pp. xx + 460. \$3.00.—The author offers an organized and detailed account of specific methods by which teachers may help pupils to plan their vocational lives. The major sections of the book deal with the following topics: (1) informing students about the occupational world, (2) acquainting pupils with sources of information regarding occupational opportunities, requirements, and trends, (3) giving pupils mastery of techniques to be used in investigating occupations, (4) informing students about courses, colleges, and schools for further training, (5) cultivating an understanding of interrelationships among occupations, (6) techniques of counseling, (7) placement and follow-up services, and (8) methods of assembling and filing materials.—

E. B. Mallory (Wellesley).

249. Gleason, C. W. Vocational guidance problems of returning veterans. *Psychol. Bull.*, 1944, 41, 584-585.—Abstract.

250. Gray, S. The vocational preferences of Negro school children. J. genet. Psychol., 1944, 64, 239-247.—The occupational choices of 797 Negro children in grades I-VI in three Southern schools are presented and analyzed, then compared with the results of a similar study of white children (see 11: 2989). "By way of summary . . . it would appear that the vocational choices of Negro school children of the first six grades tend to fall into a rather small number of classifications; that teaching is the most favored occupation with girls and medicine with boys; that the median occupational level chosen is high, skilled labor for boys and semi-professional work for girls; that the Negro girls' preferences are essentially similar to those of the white girls; that the interests of the Negro and white boys are somewhat dissimilar, the Negro boy evincing rather more interest in certain professional occupations; that the median occupational level chosen by the Negro child on a five point scale is almost one point higher than the white child's."-R. B. Ammons (Iowa).

251. Gundlach, R. H. The relative effectiveness for immediate recognition of sound-movie instructional film contrasted to a lecture. *Psychol. Bull.*, 1944, 41, 586.—Abstract.

252. Hockett, J. A. The mentally handicapped. Rev. educ. Res., 1944, 14, 217-223.—Nonmental traits accompanying feeble-mindedness, such as social adjustment, muscular fatiguability, and emotional control, are given as found in some of the studies in the past three-year period. The need for special education by separate classes and curriculum and special provision in institutions, as well as specific reading methods for this lower group, is reviewed in the literature. Reports on employability and vocational adjustments are included. 45-item bibliography.—L. Adams (Barnard).

253. Koerber, W. F. Secondary education for the non-academic adolescent. School, 1944, 33, 6-11.

—The author describes a proposed plan for the education of the mentally retarded child. The plan involves early recognition of mental ability, special curricula in preadolescent years, and a special school in the adolescent years.—G. S. Speer (Central YMCA College).

254. Layman, J. W., & Boguslavsky, G. W. The relationship between ability and achievement in the Army Specialized Training Program. J. Psychol., 1944, 18, 45-54.—Scores on 5 pretests (AGCT, ACE, Cooperative Mathematics, Cooperative Natural Science, and a special algebra test) were correlated with term grades of ASTP units numbering respectively 211, 161, and 39 trainees from three different schools. It is noted that the test abilities of ASTP trainees varied according to the STAR unit choosing them. For all three groups, the contribution of the AGCT and ACE tests to multiple correlations of pretests with course grades was negligible. The multiple correlations of the three educational achievement tests with grades were +.665, +.736, and +.665 for the three groups. From this and other studies, it appears that neither our secondary schools nor our colleges "are sufficiently challenging to induce the maximum relationship between ability and academic achievement in many individual instances."—R. B. Ammons (Iowa).

255. Marsh, C. J. Student opinion on the importance and attainment of course objectives in psychology. J. genet. Psychol., 1944, 64, 305-309.—
"For the purpose of checking up on a previous study [see 16: 4230] of student opinion of the attainment of course objectives, and also for the purpose of obtaining information on student opinion of the importance of 15 course objectives, 110 college women who had just completed their first course in psychology were asked to make two series of ratings. Results indicated only fair agreement between the two groups in ratings of attainment, and also that there were some rather wide discrepancies between ratings of importance and ratings of degree of attainment for certain objectives."—R. B. Ammons (Iowa).

256. Observer. Young people's colleges and leisure time. Brit. J. educ. Psychol., 1944, 14, 80-84. -The proposed postwar plan for colleges to provide for the further part-time education of youths up to the age of 18 must fill the primary need of adolescents for a more extended maturation and a more elaborate preparation for life. The kind of education offered must accord with the distinctive psychological characteristics of this period of development. Ample provision for wide variation in capacity will demand careful grading and grouping of the students. In these colleges, the teaching function might be considered secondary to their appropriateness as centers for leisure and recreation. The plan of organization of the college should not be uniform and rigid but should permit of ready adjustment to the adolescent's needs.—R. C. Strassburger (St. Joseph's College for Women).

257. Park, J. Postwar occupational wishes of teachers and students now in industry. Sch. & Soc., 1944, 60, 94-95.—Of 94 former teachers and 140 former students in a sample of 18,201 industrial workers in the Evansville (Ind.) area who were interrogated in the fall of 1943, only 16 and 10 respectively desire to return to their previous occupation at the conclusion of the war. Substantial portions of both groups, 47.8% of the teachers and 41.4% of the students, prefer to remain at hourly factory work. Office work is selected as the postwar activity next most preferred in the two samples.

Although the reasons for these attitudes cannot be elicited from the data of the study, possible influences are suggested.—R. C. Strassburger (St.

Joseph's College for Women).

258. Pinsent, A. Psychological and sociological principles for the reorganization of secondary educa-tion. Brit. J. educ. Psychol., 1944, 14, 57-68.—The proposal of the White Paper on Educational Reconstruction for a system of compulsory postprimary education for all children needs analysis in the light of psychological and sociological considerations. This paper explores the probable distribution of pupils under the conditions anticipated and outlines the kind of educational organization indicated. The character of secondary education offered and the nature of the curriculum will be dictated mainly by the level of general intellectual capacity of the pupil. Estimates based on measurement indicate that less than 30% of the adolescent population are likely to succeed with an academic or technical curriculum. The type of program fitted to the needs of the average or lower levels of intelligence (some 70% of the adolescent population) will differ not so much in content as in level of difficulty and form of organization. It must present experience in terms of familiar, practical situations and provide training which is topical in the sense that it grows out of local economic conditions and requirements but which is still liberal in respect to the cultivation of broader attitudes and interests. The greatest difficulty for such a program lies in obtaining teachers with suitable qualifications.—R. C. Strassburger (St. Joseph's College for Women).

259. Pressey, S. L. A neglected crucial psychoeducational problem. J. Psychol., 1944, 18, 217-234.

—The average age of graduation from college has increased to 23 years. A review of the available literature shows that a great many physical and psychological performance abilities reach maturity at about 20 years, remain at their prime for only a relatively few years, and then decline. "Maturity" and "the prime" of life have been neglected as developmental concepts. A shortening of programs of education by about two years is proposed as a measure to help make available the most productive years of life for creative activity and to help solve the educational problems of those whose education has been interrupted by the war. Bibliography of 33 titles.—R. B. Ammons (Iowa).

260. Rusk, R. R. [Dir.] The Scottish Council for Research in Education; 15th annual report, 1943-1944. A. R. Scot. Coun. Res. Educ., 1944, 16. Pp. 10.

261. Segel, D. Validity of the V. C. Aeronautics Aptitude Test and the O. E. Scientific Aptitude Test. J. Psychol., 1944, 18, 65-80.—Scores on the Victory Corps Aeronautics Aptitude Test and the Office of Education Scientific Test were correlated with the marks made by several thousand high-school students in various schools. Corrected odd-even reliability for both tests was in the .80's, while the raw correlation between marks and scores varied for schools and classes reported, ranging from .09 to .62. This variation is given as evidence that the criterion measure is somewhat unreliable. It is argued that the efficiency of aptitude tests is almost

universally underrated because of the unreliability of criterion scores. Using Monroe and Englehart's index, the tests are shown to have considerable power in predicting success in science and mathematics, and hence they are valid for use in guidance work. Sample questions from the tests are given.—R. B. Ammons (Iowa).

262. Siemens, C. H. Note on a technique in the application of the Tolley-Ezekiel method of handling multiple-correlation problems. J. exp. Educ., 1944, 12, 242-243.—A slightly modified form of the Tolley-Ezekiel method, which is a variation of the usual partial and multiple correlation technique, was applied to the problem of predicting academic success in academic courses from six known factors, all being grade-point averages in earlier academic work. It was shown that the forecasting of the level of scholarship in upper engineering courses on the basis of the data given was possible and feasible by this method. The use of the slide rule in these calculations was found sufficiently accurate and greatly reduced the labor of the investigation.—E. B. Mallory (Wellesley).

263. Traxler, A. E. The improvement of study habits and skills. Educ. Rec. Bull., 1944, No. 41. Pp. 37.—Study is defined as "the sum total of the purposeful processes by means of which individuals learn." Although basic principles of study may be taught, individual variations in their use must be considered. Topics treated include environmental, physical, intellectual, and emotional factors conditioning study; employment of scales, tests, and observational techniques; and procedures for improvement. Study activities consist of work habits and study skills. Among the former are avoidance of distractions, sustained application, self-criticism, and the weighing of evidence. The latter involve memorizing, problem solving, understanding the material, following directions, and employing devices. The bulletin concludes with a typical case study, a bibliography, and a check list of study habits under 17 main topics and 85 subtopics.—G. E. Bird (R. I. College of Education).

264. Tsao, F. A study of the relationship between grade and age and variability. J. exp. Educ., 1944, 12, 187-200.—The author describes a number of methods which may be used for testing variability. Neyman and Pearson's L1 (likelihood criterion 1) test, Bartlett's test of homogeniety of variance, and a complete analysis of variance were applied to the intelligence, arithmetic, and reading scores of children in grades 5-8. Variability in a mental or scholastic function was found constant from grade to grade and from age to age. The relationships between mental and scholastic functions were positive but not perfect, and were constant from grade to grade. The author holds that, since it appears that individual differences in degrees and patterns of ability are established at an early age, they should be taken into consideration in early educational procedures.—E. B. Mallory (Wellesley).

265. Tyler, R. W., & Detchen, L. Evaluation of educational growth during military service. Publ. Person. Rev., 1944, 5, 95-100.—"Experience in the armed forces cannot be dismissed as 'years out of one's life' in an evaluation of ability to do civilian

work." Service men and women have had three types of opportunity for educational growth: inservice training, off-duty educational programs, and informal experiences. The authors describe the functions of the United States Armed Forces Institute and, in more detail, those of the examinations staff for that institute. Four types of tests have been developed: end-of-course tests, subject-knowledge tests, tests of general educational development, and tests of competence in highly technical fields of special military importance. Procedures and forms for making educational accomplishment records available to properly interested agencies are described.—H. F. Rothe (Stevenson, Jordan & Harrison, Inc.).

266. Wallin, J. E. W., & Watson, K. B. An appeal for a thorough investigation of the relative value of teacher-training courses suggested by a limited study of the evaluation of college courses by inservice teachers. Train. Sch. Bull., 1944, 41, 49-59.

—Teachers in service, enrolled in a course on the mentally deficient, retarded, and psychopathic children, were asked to list in the order of value college courses regarded as having been of most value from the standpoint of personal and professional use. On the basis of the responses received, the writers raise the question: Should not mental hygiene be included as a required course in teacher-training curricula, especially for elementary school teachers? It is suggested that further investigation be carried out with a larger number of cases.—S. Whiteside (Cincinnati Public Schools).

267. Wright, W. A. E. The modified true-false item applied to testing in chemistry. Sch. Sci. Math., 1944, 44, 637-639.—This is a test in chemistry so arranged that the student must indicate the truth or falseness of the item and, if false, must indicate the error and correct it.—G. S. Speer (Central YMCA College).

[See also abstracts 10, 59, 174, 223, 272, 283.]

#### MENTAL TESTS

268. Cornell, E. L. Current construction and evaluation of intelligence tests. Rev. educ. Res., 1944, 14, 10-19.—Caution is advised when comparing IQ's from different tests because of differences in variability. Conceptual vs. perceptual methods for determining the relation of personality structure to intelligence are discussed. The use of achievement tests, tests of critical thinking, etc. to supplement intelligence tests of the more conventional kind is advocated for educational research. Stress is placed on the newer trend in analyzing patterns rather than in using a single quantitative score in clinical measurement of intelligence. 57-item bibliography.—L. Adams (Barnard).

269. Freeman, F. S. Applications of intelligence tests. Rev. educ. Res., 1944, 14, 20-37.—Evidence is given on the relation between intelligence tests and educational achievements in elementary, secondary, and college educational levels as being substantial but not perfect. Former findings on the effect of bilingual and social aspects of the home, on the significance of foster names, and on Negro and sex differences confirm our inability to test heterogene-

ous groups. 82 references are given.—L. Adams (Barnard).

270. McCarthy, D. A study of the reliability of the Goodenough Drawing Test of Intelligence. J. Psychol., 1944, 18, 201-216.—The Goodenough Drawing Test of Intelligence was given to 386 children in grades III and IV on two occasions a week apart. Each drawing was scored twice by the same examiner and once by a different examiner. Differences of one year or more of mental age were found 12.4% of the time where the same drawing was rescored by a single examiner, 25.3% where the same drawing was rescored by a different examiner, and 41.7% between scorings by the same examiner of pairs of drawings a week apart by the same child. Scoring and rescoring correlated an average of +.94 for the same scorer and +.90 for different scorers. The corrected odd-even reliability of the scale was +.89.—R. B. Ammons (Iowa).

271. Mellone, M. A. A factorial study of picture tests for young children. Brit. J. Psychol., 1944, 35, 9-16.-A battery of 14 picture tests, a word-reading test, and a mechanical arithmetic test was given to 414 seven-year-old elementary school children. The intercorrelations of the test scores were analyzed by Thurstone's centroid method. One general factor and specifics were sufficient to explain the girls' picture-test scores; two common factors and specifics, the complete battery. For the boys, two common factors and specifics were needed to explain the picture-test scores; three common factors and specifics, the complete battery. When the centroid matrices were rotated to eliminate negative loadings, it was found that the first factor was a general intellectual one, present in all the picture tests and slightly in the scholastic ones. The second factor, present in the complete battery but not in the picture tests, was identified as a scholastic factor, a mixed verbal-number one with rather more number than verbal for the boys, and rather more verbal than number for the girls. The third factor appearing in the picture tests and the complete battery for the boys, but not at all for the girls, was identified as a space factor. The absence of this factor pre-vented the girls from doing as well as the boys on Block Counting and Mazes; but other tests involving a space factor for boys were done equally well by the girls by means of their general intellectual ability.-M. D. Vernon (Cambridge).

272. Rosenzweig, S., Bundas, L. E., Lumry, K., & Davidson, H. W. An elementary syllabus of psychological tests. J. Psychol., 1944, 18, 9-40.—
To meet the need for an up-to-date elementary syllabus of representative psychological tests for use by instructors or by those who wish to familiarize themselves with the possibilities in such testing, a series of 18 tests is outlined, covering the fields of intelligence, intellectual deterioration, vocational aptitude, personality, and projective approaches. Tests are discussed as to purpose, materials, instructions, obtained data, scoring methods, and interpretation. To show how tests may be integrated, 3 sample cases are presented with background, test findings, and interpretation.—R. B. Ammons (Iowa).

273. Spache, G. Methods of predicting results of full scale Stanford-Binet. Amer. J. Orthopsychiat.,

1944, 14, 480-482.—Using a group of 89 private-school children as subjects, the author investigated the possibility of substituting the short form, the vocabulary test, or Wright's modified short form for the full scale Binet. Of the three measures, Wright's scale gives the best prediction of full-scale results. However, it is not sufficiently accurate to be substituted for full-scale testing in clinical situations.—R.

E. Perl (New York City).

274. Terman, E. L., McCall, W. A., & Lorge, I. Non-language multi-mental test. Forms A and B. New York: Bureau of Publications, Teachers College, Columbia University, 1942. \$3.15 per hundred.—This test is designed to yield an estimate of intelligence for pupils and adults who do not speak English, or who are illiterate, or who are deaf or deafened. Directions may be either verbal or in pantomime. "In essence, the test requires the same type of intelligent performance among its pictorial symbols as is required among more conventional verbal symbols. The kinds of relationship required are of the form of relations of opposites, of similar pairs, of part to whole, of whole to parts, and of sequences." Reliability for grades III-VIII, estimated by the Kuder-Richardson formula, is .86 for Form A, .90 for Form B, and .94 for both. Mental age and grade equivalents for scores are given.—

L. H. McCabe (Cambridge, Mass.).

275. Vernon, P. E. Proceedings of the Education Section of the British Psychological Society; the disclosing of intelligence test results to semi- and non-professional persons by professional psychologists. Brit. J. educ. Psychol., 1944, 14, 106-109.—Specific recommendations for the guidance of practicing psychologists in the reporting of intelligencetest results to the persons concerned are presented in this summary of the discussion at the February, 1944, meeting. Caution in the revelation of results is needed, especially where parents or the testees themselves are involved. Numerical scores should never be reported abstracted from the total personality picture. For various reasons, considerable restrictions in the use of the term IQ are to be observed: it should be limited to the results of an individual test, with the test name attached, and should scarcely ever be reported to teachers who would find greater significance in MA's and EA's. Alternative methods of indicating comparative performance, such as SD scores, might be used, or it might be preferable to establish grades on the basis of percentiles. Since actual percentiles are not the most satisfactory way of communicating scores, more suitable labels constituting a numerical scale, a letter scale, or a verbal scale might be found. Of these, the numerical scale would appear to be least objectionable. The plan for a functional terminology of classification of test scores in relation to educational and occupational standards is impracticable at the present time. - R. C. Strassburger (St. Joseph's College for Women).

#### [See also abstract 196.]

#### CHILDHOOD AND ADOLESCENCE

276. Baruch, D. W., & Wilcox, J. A. A study of sex differences in preschool children's adjustment coexistent with interparental tensions. J. genet.

Psychol., 1944, 64, 281-303.-Forty-two boys and 34 girls in preschool, ages 1 year 6 months to 5 years 7 months, were observed, and data were collected concerning their adjustment. Data were also collected from their parents by psychiatric social-work type interviews concerning interparental tensions. Child adjustment was significantly related to interparental tensions over sex, lack of consideration, inability to talk over differences, lack of expressed affection, and ascendance-submission; while tensions over items, such as work and friends, showed little relation to child adjustment. Significant tensions seemed to be closely related to fundamental affectional and ego values. While there was no statistically significant difference between the effects of interparental tensions on boys and their effects on girls, it appeared that the girls were somewhat more affected. 39-item bibliography.—R. B. Ammons (Iowa).

277. Bender, L., & Rapoport, J. Animal drawings of children. Amer. J. Orthopsychiat., 1944, 14, 521-527.—The recurrence of animal figures in children's phobias and in totemism, myths, and fables indicates that animals have certain attributes which furnish the human mind with an excellent medium for the displacement of repressed drives. Children's drawings of nonaggressive-looking animals seem to be associated with the mild behavior problems, while the psychoneurotics draw aggressive animals. Case material is presented to illustrate the fact that some children who draw aggressive animals suffer from a severe superego which leads to a displacement of the fear of the father on to an aggressive animal.—R. E. Perl (New York City).

278. Bertocci, P. A. The moral outlook of the adolescent in war time. Ment. Hyg., N. Y., 1944, 28, 353-367.—Examination of adolescent essays and conversation about the war reveals that a range of feelings, from pettiness to nobility, analogous to that which pervades the life of average adults, exists. The feeling of urgency that envelops the life of the nation at war is not a favorable factor in the conscious-unconscious struggle for status, significance, or meaning. The war situation must be reinterpreted, so that the adolescent sees his part in it clearly and realizes the moral value of his actions.—W. L. Wilkins (U. S. Naval Reserve).

279. Bruch, H. Food and emotional security. Nerv. Child, 1944, 3, 165-173.—Children who are not given adequate acceptance and emotional support may overeat to combat anxiety and to satisfy aggressive impulses. Such cases may develop conspicuous obesity, which has emotional significance as a compensation for stunted growth in personal independence and as a protective wall against the threatening outer world. "Comparable degrees of undernutrition, for emotional reasons, are rarely encountered in childhood."—G. S. Speer (Central YMCA College).

280. Chess, S. Developmental language disability as a factor in personality distortion in child-hood. Amer. J. Orthopsychiat., 1944, 14, 483-490.—Seven selected cases of language disability, referred to the Children's Ward of the Psychiatric Division of Bellevue Hospital because of behavior difficulties, are here analyzed. The personality difficulties which

arise through struggling with language must be differentiated from those related to family, school, and other traumatic situations. The author describes language disability as a clinical entity of a primary nature. It should be looked upon as a syndrome to be considered in the differential diagnosis of childhood behavior disorders and neurotic and psychotic states.—R. E. Perl (New York City).

281. Coleman, J. V., & Aptekar, H. H. Division of responsibility between psychiatrist and social worker in a foster home agency. Amer. J. Orthopsychiat., 1944, 14, 511-520.—This paper consists of (1) a social worker's statement with regard to the case worker's function as related to that of the psychiatrist, (2) the psychiatrist's view of the nature of his contribution in a foster home agency, and (3) a condensation of an outline prepared by an agency committee which framed policies on the use of a psychiatrist in Foster Home Bureau.—R. E. Perl (New York City).

282. Deutsch, F. Prophylactic aspects of the malnutrition problem. Nerv. Child, 1944, 3, 195–215.—Important factors in malnutrition are constitutional and accidental elements, the personality of the mother, the position of the child in the family constellation, and neuroses of the parents or other members of the family. It is suggested that "the prophylactic aspects of malnutrition are in the main problems of prevention of a neurosis due to external frustrations in earliest childhood, and centered around the food intake, which leads later to the need of expressing instinctual frustrations in the gastrointestinal tract, whenever a situation of emotional conflict arises."—G. S. Speer (Central YMCA College).

283. Gray, S. The wishes of Negro school chil-J. genet. Psychol., 1944, 64, 225-237.-Eight hundred twenty Negro children in grades I-VI in Southern schools were rated as to socioeconomic status and asked to name the one thing in the world they would like to have more than anything else. Except for increase in interest in bicycles and education and decrease in interest in automobiles and toys, there appeared to be little relationship between wishes and CA or grade placement. The only significant sex differences were where girls wished for pianos and watches and, in general, for things concerning home, while boys were more interested in travel and conveyance. There were no differences in wishes by the different economic groups. Comparing these results with those in a similar study by Boynton (see 10: 3775) of white children, Gray found that, although there are some differences, the two groups are basically similar and show a lack of relationship between interests and the four factors studied, i.e., CA, grade placement, sex, and economic status. He concludes: "it would seem that one is led to the view that a child's interests are dependent upon the particular experiences through which he as an individual has passed."—R. B. Ammons (Iowa).

284. Gula, M. Boys House—the use of a group for observation and treatment. Ment. Hyg., N. Y., 1944, 28, 430–437.—Diagnosis in a group-living situation is found to be more accurate than individual diagnosis for many cases of delinquent, disturbed, or sophisticated boys, as observation in the group

facilitates the diagnosis. Immature, dependent, and noncommunicative boys show particularly good gains from group treatment.—W. L. Wilkins (U. S. Naval Reserve).

285. Halverson, H. M. Mechanisms of early infant feeding. J. genet. Psychol., 1944, 64, 185-223.

—The feeding behavior of 12 infants was observed at regular intervals from birth to 18 weeks, and in the case of 2 additional infants, from birth to 8 weeks. Sucking and costal and abdominal respiratory movements were recorded kymographically, while swallowing was noted by means of a stethoscope. Records are presented and analyzed under the following headings: effects of sucking on breathing; types of feeding and their frequency of occurrence; swallowing; breathing adjustments to sucking and swallowing; position of the lower jaw during swallowing; sucking rates, breathing rates, and suckrespiration ratios; duration of individual sucks; comparison of amplitudes of chest and abdominal movements; temporal development of co-ordination; and characteristics of good and poor feeding.—R. B. Ammons (Iowa).

286. Harms, E. The development of religious experience in children. Amer. J. Sociol., 1944, 50, 112-122.—A study of children's religious imaginations, as expressed in drawings and paintings during specially conducted experiments, showed quite different results from those found by studies of what children say about their religion and God. An examination of such graphic expressions in the various age levels resulted in the postulation of three different stages of religious experience in children: the fairy-tale, the realistic, and the individualistic.—D. L. Glick (American University).

287. Hildreth, G. The simplification tendency in reproducing designs. J. genet. Psychol., 1944, 64, 329-333.—A group of 4-year-old children, above average in intelligence, were asked to reproduce a number of figures. Where the design was too difficult for the child to reproduce correctly, he tended to simplify the design according to certain principles: substitute a familiar simpler design; unify or close the design; simplify the design by omitting detail; or introduce rhythm, symmetry, or conventional proportions where these were lacking. The child reworks a concept to fit his experience and ability.—R. B. Ammons (Iowa).

288. Hubbard, R. M. The psychologist working with crippled children. Ment. Hyg., N. Y., 1944, 28, 397-407.—The psychologist functions in giving tests to determine how a child with a handicap can compete with normal people, in working out educational plans, in making vocational plans, in assessing personality attributes, and in helping the child to adjust to his limitations realistically. It is important to individualize the child on the basis of his possibilities rather than on the basis of his disabilities.—W. L. Wilkins (U. S. Naval Reserve).

289. Jones, F. N. The explanation of physical phenomena given by white and Negro school children. Psychol. Bull., 1944, 41, 588.—Abstract.

290. Klugman, S. F. Memory for position, among children, as measured by serial reproduction. *Brit. J. Psychol.*, 1944, 35, 17-24.—Sixty children with a mean age of 11 years 11 months (range 10.5 to 15.1)

were requested to copy a dot, placed equidistant from the top and sides of a sheet of paper, on the same spot on another piece of paper of the same size. Afterwards the children were required to copy the dot from memory, with various time intervals, by Bartlett's serial reproduction method. In copying, no significant differences of accuracy were found between boys and girls, white and colored children, older and younger children, or those of higher and lower IQ. The same lack of significant difference was found for accuracy of remembering the position of the dot. No relation existed between ability to copy the dot accurately and ability to remember its position after an interval of time. The shifts of the remembered positions were plotted as memographs. No definite patterns of shift could be found from these, and the distance between their starting and ending points bore no relation to the length of time interval for remembering.—M. D. Vernon (Cambridge).

291. Kostenbader, L. M. Does war frighten children? Nation's Schs, 1944, 34, No. 3, 30-31.—A questionnaire administered to 268 seventh-grade children gives definite indication that these children are not seriously perturbed by the war and that the majority of them have been beneficially affected through improved home situations.—G. S. Speer (Central YMCA College).

292. Northway, M. L. Children with few friends. School, 1944, 32, 380-384.—A sociometric study of school children revealed three types of unaccepted or rejected children: (1) the recessive child, who requires psychiatric help; (2) the socially uninterested child, who possesses genuine interests of a nonsocial type; and (3) the socially ineffective child, who uses aggressive or ineffective behavior to gain a social attention in place of the social acceptance he desires.

—G. S. Speer (Central YMCA College).

293. Reymert, M. L. The place of war toys in the present emergency. J. genet. Psychol., 1944, 64, 317-322.—A questionnaire consisting of 20 statements of opinion concerning war toys (to be rated 'agree,' 'undecided,' or 'disagree') was sent to 100 psychologists, 69 of whom replied. There appeared to be a wide diversity of opinion concerning the value and uses of war toys and a noticeable amount of indecision concerning these issues. It is pointed out that these problems are practical ones, often calling for immediate solution without adequate experimental evidence.—R. B. Ammons (lowa).

294. Smith, T. Enuresis and problem children: a study of some factors bearing upon child guidance work. Brit. J. educ. Psychol., 1944, 14, 110.—Abstract.

295. Stradford, G. T. Behavior problems of bright and dull Negro children. Smith Coll. Stud.

soc. Work, 1944, 15, 51-65.—Case records in the Institute of Juvenile Research on 20 dull (IQ 80-90) and 18 bright (IQ 115 and higher) Negro children were examined. Socioeconomic and cultural factors seem more important than intelligence in determining the types of problems presented. Eight brief case histories are offered.—M. R. Jones (U. S. Naval Reserve).

296. Washburn, R. W. Re-education in a nursery group; a study in clinical psychology. Monogr. Soc. Res. Child Develom., 1944, 9, No. 2. Pp. iii + 175.— The work is reported of the nursery group at the Clinic of Child Development at Yale University, directed to questions of "how the emotional relationships between parents and their young children might be made more comfortable." Part I describes the general source of difficulty as the inevitable conflict between the child "and those who are faced with the task of civilizing him." The nature of the contacts with children and parents and the techniques for observation and therapy are discussed. Part II illustrates with case material the three therapeutic levels at which the clinic operates: offering information on child development, helping patients reach new perspective when family emotional relations are involved, and furnishing psychiatric treatment where more fundamental disturbances exist. Part III, again with liberal use of case material, describes the groups of children in the nursery, including the shifting group of clinic children and the nuclear group of more stable children. The appendix explains the physical setup, the records used, and instructions for parents, with tables of data on contacts, developmental status, etc. of the children studied.-L. J. Stone (Vassar).

297. White, H. C. An adventure in group therapy in a family-agency setting. Ment. Hyg., N. Y., 1944, 28, 422-430.—A study of a single group of 8 adolescent girls during group experience showed 5 stages: acquaintance, open conflicts, the focusing of attention on common objectives, camp experience, and realignment of the group to new ends.—W. L. Wilkins (U. S. Naval Reserve).

298. Woods, E. L. The mentally gifted. Rev. educ. Res., 1944, 14, 224-230.—This is a review (22 references) of studies made since 1941 on the social and emotional adjustments, the economic backgrounds, interests and hobbies, educational achievements, and consistency of the superiority of the mentally gifted group. Further research is needed in identifying and providing for this group in homes and schools, with special emphasis on the study of personality difficulties.—L. Adams (Barnard).

[See also abstracts 84, 114, 137, 149, 177, 178, 201, 253, 256, 258, 271.]

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